Bay Area Air Quality Management District

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

Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:

Calpine Gilroy Cogen, L. P. and Gilroy Energy Center, LLC Facility #B1180

Facility Address: 1400 Pacheco Pass Highway Gilroy, CA 95020

> Mailing Address: P.O. Box 1764 Gilroy, CA 95021

Responsible Official Eugene Fahey, General Manager (831) 385-79424090 ext: 54212 Facility Contact <u>Michael FeesMaria Barroso</u>, <u>O&MCompliance</u> Manager (408831) 337385-34254090; ext: 13

Alternate Responsible Official

Michael Fees, Operations and Maintenance Manager, (408) 337-3425847-5328; ext:

71417

Maria Barroso, Compliance Manager, (831) 385-79434090; ext: 13

Type of Facility:	Cogeneration Plant & Power Plant 265 MW	BAAQMD EngineeringPermit
		Division Contact:
Primary SIC:	4911	Brian LusherAllan Chiu
Product:	Cogeneration of electricity and steam	

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

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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 6/28/99); 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 1/26/99); 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 1/26/99); and BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking (as amended by the District Board on 1/16/03). SIP Regulation 2, Rule 4 - Permits, Emissions Banking (as approved by EPA through 1/26/99). BAAQMD Regulation 2, Rule 5 - New Source Review of Toxic Air Contaminants (as adopted by the District Board on 6/15/05); BAAOMD Regulation 2, Rule 6 - Permits, Major Facility Review (as amended by the District Board on 4/16/03).

SIP Regulation 2, Rule 6 – Permits, Major Facility Review (as approved by EPA through 6/23/95).

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

- 1. This Major Facility Review Permit was reissued 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** . If the permit renewal has not , but a complete application for renewal has been submitted in been issued by accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407, & 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and reissuance, 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 permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (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)
- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, 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 required to be maintained pursuant to this permit that the permit holder considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 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 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. (MOP Volume II, Part 3, §4.11)
- 12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307).

C. Requirement to Pay Fees

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

D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (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, 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 reporting periods for this permit shall be May 1st to October 30th and November 1st to April 30th. Each report is due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

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

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

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 May <u>1st12th</u> through <u>April 30thMay</u> 11th. The certification shall be submitted by <u>May 31stJune 12th</u> 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 and Enforcement Division at

the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

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

(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

The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedence 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 <u>not</u> subject to 40 CFR Part 68, Chemical Accident Prevention Provisions since no chemicals are in use at the facility that trigger this regulatory requirement. The ammonia concentration used in the SCR units (A-4, A-6, A-8) is less than 20% by weight. The facility is subject to State Accident Prevention Provisions including the preparation of a risk management plant (RMP). The ammonia in use at (A-4, A-6, A-8) is 19% by weight and the quantity in use exceeds the 500 lb State Threshold Quantity.

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 March 1st of the following year (or February 29 in any leap year or if such day is not a business day, the first business day thereafter) 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_2 and NO_x shall be maintained and operated in accordance with 40 CFR Parts 72 and 75. (Regulation 2, Rule 7, Acid Rain)
- 3. A written Quality Assurance program must be established in accordance with 40 CFR Part 75, Appendix B for NO_x 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, Rule 7, Acid Rain)
- 4. The permit holder shall monitor SO₂ emissions in accordance with 40 CFR Part 72 and 75. (Regulation 2, Rule 7, Acid Rain)
- 5. The permit holder shall submit quarterly Electronic Data Reports (EDRs) to EPA for Turbines, S-3, S-4, S-5.In addition, from March 1, 2005 onward, the permit holder shall submit quarterly Electronic Data Reports (EDRs) to EPA for the combined cycle turbine S-100. 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 LIST**

Table II-A

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 J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
3	Nominal 45 MW Gas Turbine Generator, Natural Gas with water injection	General Electric	LM6000PC	500 MMBtu/hour (HHV)
4	Nominal 45 MW Gas Turbine Generator, Natural Gas with water injection	General Electric	LM6000PC	500 MMBtu/hour (HHV)
5	Nominal 45 MW Gas Turbine Generator, Natural Gas with water injection	General Electric	LM6000PC	500 MMBtu/hour (HHV)
6	Emergency Standby Fire Pump: Diesel Engine	Cummins	NT 495 FP	170 HP
100	Nominal 87 MW Gas Turbine Generator, Natural Gas with steam injection with Dry Low NO _x combustors and no steam injection	General Electric	Frame 7EA	1085 MM Btu/hr (HHV) @ 35 F
101	Auxiliary Boiler, Natural Gas	Nebraska	NSE68	104 MM Btu/hr (natural gas)
102	Auxiliary Boiler, Natural Gas	Nebraska	NSE68	104 MM Btu/hr (natural gas)
104	Cooling Tower, Counterflow,	Marley, Three Cell		1.44 MM gallons per hour

II. Equipment List

		Source(s)	Applicable	Operating	Limit or
A- #	Description	Controlled	Requirement	Parameters	Efficiency
3	Oxidation catalyst	3	BAAQMD		CO < 6 ppm
			Condition		POC < 2 ppm
			#18102 part		
			19.3 &19.4		
4	Selective Catalytic	3	BAAQMD		$NO_x < 5 ppm$
	Reduction System		Condition		
			#18102 part		
			19.1		
5	Oxidation catalyst	4	BAAQMD		CO < 6 ppm
			Condition		POC < 2 ppm
			#18102 part		
			19.3 &19.4		
6	Selective Catalytic	4	BAAQMD		$NO_x < 5 ppm$
	Reduction System		Condition		
			#18102 part		
			19.1		
7	Oxidation catalyst	5	BAAQMD		CO < 6 ppm
			Condition		POC < 2 ppm
			#18102 part		
			19.3 &19.4		
8	Selective Catalytic	5	BAAQMD		$NO_x < 5 ppm$
	Reduction System		Condition		
			#18102 part		
			19.1		
100	Oxidation Catalyst	S100	BAAQMD	All conditions except	$\rm CO < 10 \ ppm$
			Condition	startup and shutdown	
			#2780 part 3		

Table II-B – Abatement Devices

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 will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit. This section also contains provisions that may apply to temporary sources.

The dates in <u>parentheseparentheses</u> in the Title column identify the versions of the regulations being cited and are, as applicable:

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

NOTE:

There are differences between the current BAAQMD rule and the version of the rule in the SIP. All sources must comply with <u>both</u> versions of the rule until US EPA has reviewed and approved the District's revision of the regulation.

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (7/19/0605/02/01)	Ν
SIP Regulation 1	General Provisions and Definitions (6/28/998/27/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (7/19/068/1/01)	Ν
SIP Regulation 2, Rule 1	General Requirements (1/26/99)	Y
BAAQMD 2-1-429	Federal Emissions Statement (<u>12/21/046/7/95</u>)	Y

Table IIIGenerally Applicable Requirements

III. Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 2-1-429	Federal Emissions Statement (4/3/95)	<u>Y</u>
BAAQMD Regulation 2, Rule 2	Permits, New Source Review (6/15/05)	N
SIP Regulation 2, Rule 2	Permits, New Source Review (1/26/99)	Y
BAAQMD Regulation 2, Rule 3	Permits, Power Plants (12/19/79)	<u>Y</u>
BAAQMD Regulation 2, Rule 4	Permits, Emissions Banking (12/21/04)	N
SIP Regulation 2, Rule 4	Permits, Emissions Banking (01/26/99)	<u>Y</u>
BAAQMD Regulation 2, Rule 5	New Source Review of Toxic Air Contaminants (6/15/05)	N
BAAQMD Regulation 2, Rule 6	Permits, Major Facility Review (4/16/03)	N
SIP Regulation 2, Rule 6	Permits, Major Facility Review (6/23/95)	<u>Y</u>
BAAQMD Regulation 2, Rule 9	Permits, Interchangeable Emission Reduction Credits	N
	<u>(6/15/05)</u>	
BAAQMD Regulation 3	Fees	N
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 (<u>3/6/0211/2/94</u>)	N
SIP Regulation 5	Open Burning (9/4/98)	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	N
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (12/5/07)	<u>N</u>
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	<u>Y</u>
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 2	<u>Organic Compounds – Miscellaneous Operations</u> (7/20/05)	<u>N</u>
SIP Regulation 8, Rule 2	<u>Organic Compounds – Miscellaneous Operations</u> (3/22/95)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/01)	N
BAAQMD Regulation 8, Rule 4	Organic Compounds – General Solvent and Surface	<u>Y</u>
	Coating Operations (10/16/02)	
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	<u>Y</u>
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/0512/15/99)	Y

Table IIIGenerally Applicable Requirements

III. Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	<u>Y</u>
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05/6/15/94)	Y
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	<u>Y</u>
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 (7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	<u>Y</u>
BAAQMD Regulation 9, Rule 9	Nitrogen Oxides and Carbon Monoxide from Stationary Gas Turbines	
SIP Regulation 9, Rule 9	Nitrogen Oxides from Stationary Gas Turbines	
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N
California Health And Safety Code Section 44300 Et Seq.	Air Toxics "Hot Spots" Information And Assessment Act Of 1987	N
California Health and Safety Code Title 17, Section 93115 et seq.	Airborne Toxic Control Measure for Stationary Compression Ignition Engines	<u>N</u>
California Health and Safety Code Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower	<u>N</u>
40 CFR Part 60 Subpart GG	and Greater Standards of Performance for Stationary Gas Turbines (2/24/06)	<u>Y</u>
40 CFR Part 60, Subpart KKKK	Standards of Performance for Stationary Combustion Turbines (7/6/06)	<u>Y</u>

Table IIIGenerally Applicable Requirements

III. Generally Applicable Requirements

Applicable	Regulation Title or	Federally Enforceable
Requirement	Description of Requirement	(Y/N)
40 CFR Part 61, Subpart M	National Emission Standards For Hazardous Air Pollutants – National Emission Standard For Asbestos (6/19/95)	Y
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)	Y
Subpart F, 40 CFR 82.156	Leak Repair	Y
Subpart F, 40 CFR 82.161	Certification of Technicians	Y
Subpart F, 40 CFR 82.166	Records of Refrigerant	Y
40 CFR Part 82, Subpart H	Protection of Stratospheric Ozone; Halon Emissions Reduction (03/05/98)	<u>Y</u>
<u>Title 40 Part 82 Subpart H</u> <u>82.270(b)</u>	Prohibitions, Halon (03/05/98)	<u>Y</u>

Table IIIGenerally Applicable Requirements

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:

- 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 text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. Additionally, where an applicable requirement is a SIP requirement, the full language of the SIP requirement is included in Appendix A of this permit on EPA Region 9's website. The address is

<u>http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions</u>. All other text may be found in the regulations themselves.

Table IV – ASource-specific Applicable RequirementsS-3, S-4, S-5, GAS TURBINES

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	General Provisions and Definitions (7/9/085/2/01)		
Regulation 1			
1-431	Breakdown Report	Y	
1-432	Written Breakdown Report	Y	
1-433	Determination of Breakdown	Y	
1-520	Continuous Emission Monitoring	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-522.1	Plans and Specifications	Y	
1-522.2	Installation Scheduling	Y	
1-522.3	Performance Testing	Y	
1-522.4	Periods of Inoperation Greater Than 24 Hours	Y	

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
1-522.5	Calibration	Y	
1-522.6	Accuracy	Y	
1-522.7	Excesses	Ν	
1-522.8	Monthly Reports	Y	
1-522.9	Records	Y	
1-522.10	Monitors Required by Sections 1-521 or 2-1-403	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
SIP Regulation 1	General Provisions and Definitions (6/28/99)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y ¹	
1-522.7	Emission limit exceedance reporting requirements	Y ¹	
BAAQMD	Regulation 2, Rule 1 - Permits, General Requirements		
Regulation 2,	(<u>7/19/06</u> 8 /1/01)		
Rule 1			
2-1-501	Monitors	Y	
BAAQMD	Particulate Matter and Visible Emissions (12/19/90)		
Regulation 6			
6-301	Ringelmann Number 1 Limitation	¥	
6-305	Visible Particles	¥	
6-310	Particulate Weight Limitation	¥	
6-401	Appearance of Emissions	¥	
BAAQMD	Particulate Matter, General Requirements (12/5/07)		
Regulation 6, Rule 1			
<u>6-1-301</u>	Ringelmann Number 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-401	Appearance of Emissions	<u>N</u>	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
<u>6-301</u>	Ringelmann Number 1 Limitation	<u>Y</u>	
<u>6-305</u>	Visible Particles	<u>Y</u>	
<u>6-310</u>	Particulate Weight Limitation	<u>Y</u>	
6-401	Appearance of Emissions	<u>Y</u>	

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Description of Requirement	(1/1)	Date
Regulation 9,	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas		
<u>Regulation 9,</u> <u>Rule 9</u>	<u>Turbines (12/6/06)</u>		
9-9-113	Exemption – Inspection/Maintenance	<u>N</u>	
<u>9-9-114</u>	Exemption – Start-Up/Shutdown	<u>N</u>	
<u>9-9-301.1.3</u>	Emission Limits- Turbines Rated ≥ 10 MW w/SCR, NOx ≤ 9 ppm	<u>N</u>	
<u>9-9-301.2</u>	Emission Limits, General, > 250 to 500 MMBtu/hr, 0.43 lbs/MWhr or 9 ppmv	<u>N</u>	
<u>9-9-401</u>	Certification, Efficiency	<u>N</u>	
<u>9-9-501</u>	Monitoring and recordkeeping requirements	<u>N</u>	
SIPBAAQM D Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (<u>12/15/979/21/94</u>)		
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	
9-9-401	Certification, Efficiency	Y	
9-9-501	Monitoring and recordkeeping requirements	Y	
BAAQMD Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
40 CFR 60	Standards of Performance for New Stationary Sources (<u>1/28/0912/23/71</u>)	Y	
Subpart A		37	
Subpart A	General Provisions	¥	
60.4(b)	Reports To EPA And District	¥	
60.7 (a)	Written notification	Y	

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.7(b)	Records	¥	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
Subpart GG	Standards of Performance for Stationary Gas Turbines (2/24/061/27/82)		
60.330	Applicability and designation of affected facility	<u>Y</u>	
<u>60.330(a)</u>	All stationary gas turbines with a heat input greater than 10 MMBtu/hour.	<u>Y</u>	
<u>60.330(b)</u>	Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of §60.332.	<u>Y</u>	
60.332	Standard for nitrogen oxides	<u>Y</u>	
<u>60.332(a)(1)</u>	NO _x limit	<u>Y</u>	
60.333	Standard for sulfur dioxide	<u>Y</u>	
<u>60.333(a)</u>	SO ₂ Concentration < 0.015 percent @15% O ₂ (Turbine Only)	<u>Y</u>	
<u>60.333(b)</u>	Fuel Sulfur Content cannot exceed 0.8 percent by weight (Turbine Only)	<u>Y</u>	
<u>60.334</u>	Monitoring of operations	<u>Y</u>	
60.334(b)	Requirements for CEMS consisting of NO_x and O_2 monitors installed at turbines which use water injection that were constructed, reconstructed, or modified after October 3, 1977, but before July 8, 2004	Y	
<u>60.334(c)</u>	For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NOx emissions, the owner/operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meet the requirements of paragraph (b) of this section. If the owner/operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NOx emission	Ϋ́	After dry Low NOx combustors become operational (by 1/1/2012)

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.334(h)(1)	Requirements for monitoring total sulfur content of fuel fired in turbines, except as provided in paragraph (h)(3) of this section.	Y	
60.334(h)(3)	Exemption from sulfur fuel monitoring requirements (Natural Gas)	<u>Y</u>	
60.334(i)(2)	Frequency (once per unit operating day) of determining the sulfur and nitrogen content of the gaseous fuel fired in the turbines	¥	
<u>60.334(j)(1)</u> (iii)	NOx Excess Emissions and Monitor Downtime reporting requirements	<u>Y</u>	
60.332(a)(1)	NOx limit	¥	
60.333	Standard for SO2	¥	
60.334(h)(3)	Options available to owner/operator to discontinue total sulfur content monitoring	¥	
60.334 (j)(1)(iii)	Nitrogen oxides: Excess emissions and monitor downtime reporting requirements for turbines using NOx and diluent CEMS	¥	
60.334 (j)(2)(i)	Sulfur Dioxide: (Applicable only if owner or operator is required to monitor sulfur content of fuel per Section 60.334(h)) Excess emissions	¥	
60.334 (j)(2)(iii)	Sulfur Dioxide: Fuel sulfur content monitor downtime	¥	
60.334(j)(5)	Postmarking requirements for reports	¥	
60.335	Test Methods and Procedures	Y	
40 CFR 60 Appendix B	Performance Specifications	Y	
Performance Specification 2	Specifications and test procedures for SO_2 and NO_x continuous emission monitoring systems in stationary sources	Y	
Performance Specification 3	Specifications and test procedures for O ₂ and CO ₂ continuous emission monitoring systems	Y	
40 CFR 60	Quality Assurance Procedures		
Appendix F			
Procedure 1	Quality assurance requirements for gas continuous emission monitoring systems used for compliance determination	Y	

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR	Title IV – Acid Rain Program	Y	
Part 72			
	Subpart A – Acid Rain Program General Requirements		
<u>72.6</u>	Applicability	<u>Y</u>	
<u>72.6(a)(3)</u>	New utility unit (at the time of commencement of commercial operation)	<u>Y</u>	
<u>72.9</u>	Standard Requirements	<u>Y</u>	
<u>72.9(a)</u>	Permit Requirements	<u>Y</u>	
<u>72.9(a)(1)(i)</u>	Submittal of a complete acid rain permit application	<u>Y</u>	
<u>72.9(a)(1)(iii)</u>	Submittal of information in a timely manner	<u>Y</u>	
<u>72.9(a)(2)(i)</u>	Operation in compliance with Acid Rain permit	<u>Y</u>	
<u>72.9(a)(2)(ii)</u>	Have an Acid Rain Permit	<u>Y</u>	
<u>72.9(b)</u>	Monitoring Requirements	Y	
<u>72.9(c)</u>	Sulfur Dioxide Requirements	<u>Y</u>	
<u>72.9(c)(1)</u>	Requirement to hold allowances as of allowance transfer deadline	<u>Y</u>	
<u>72.9(c)(2)</u>	Each ton of excess SO ₂ emissions is a separate violation of the CAA	<u>Y</u>	
<u>72.9(c)(3)</u>	Initial deadline to hold allowances	<u>Y</u>	
72.9(c)(3)(iv)	Deadline at time of monitor certification	<u>Y</u>	
<u>72.9(c)(4)</u>	Use of Allowance Tracking System	Y	
<u>72.9(c)(5)</u>	Allowances may not be deducted prior to year for which allowance was allocated	<u>Y</u>	
72.9(c)(6)	Limited authorization	<u>Y</u>	
72.9(d)	Nitrogen Oxide Requirements	Y	
<u>72.9(e)</u>	Excess emissions requirements	Y	
<u>72.9(f)</u>	Recordkeeping and Reporting Requirements	Y	
<u>72.9(g)</u>	Liability	Y	
<u>72.9(h)</u>	Effect on Other Authorities	<u>Y</u>	
	Subpart C – Acid Rain Permit Applications		
<u>72.30(a)</u>	Requirement to apply	<u>Y</u>	
<u>72.30(c)</u>	Duty to reapply. Requirement to submit complete acid rain application	<u>Y</u>	
	6 months prior to expiration of current acid rain permit.		
<u>72.31</u>	Information requirements for Acid Rain permit applications	<u>Y</u>	
<u>72.31(a)</u>	Identification of affected source	<u>Y</u>	
72.31(b)	Identification of each affected emissions unit	<u>Y</u>	

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>72.31(c)</u>	Complete compliance plan	<u>Y</u>	
<u>72.31(d)</u>	Standard requirements under 40 CFR 72.9	<u>Y</u>	
<u>72.31(e)</u>	If the Acid Rain permit application is for Phase II and the unit is a new	<u>Y</u>	
	unit, the date that the unit has commenced or will commence operation		
	and the deadline for monitor certification.		
<u>72.32</u>	Permit application shield and binding effect of permit application	<u>Y</u>	
	Subpart E – Acid Rain Permit Contents		
<u>72.50</u>	General	<u>Y</u>	
<u>72.50(a)</u>	Acid Rain Permits	<u>Y</u>	
<u>72.50(a)(1)</u>	Permits must contain all elements of complete Acid Rain Application	<u>Y</u>	
	<u>under 40 CFR 72.31</u>		
<u>72.50(b)</u>	Permits include terms in 40 CFR 72.2	<u>Y</u>	
<u>72.51</u>	Permit Shield	<u>Y</u>	
40 CFR	Code of Federal Regulations, Continuous Emissions Monitoring	Y	
Part 75			
	Subpart A – General	<u>Y</u>	
<u>75.2</u>	Applicability	<u>Y</u>	
<u>75.2(a)</u>	Applicability to affected units subject to Acid Rain emission limitations	<u>Y</u>	
<u>75.4</u>	Compliance Dates	<u>Y</u>	
<u>75.4(b)</u>	New affected unit (at the time of the commencement of commercial	<u>Y</u>	
	operation) shall ensure that all monitoring systems required under this		
	part for monitoring of SO ₂ , NO _x , CO ₂ , opacity, and volumetric flow are		
	installed and all certification tests are completed on or before the later of		
	the following dates		
<u>75.4(b)(2)</u>	The earlier of 90 unit operating days or 180 calendar days after the date	<u>Y</u>	
	the unit commences commercial operation, notice of which date shall be		
	provided under subpart G of this part.		
<u>75.5</u>	Prohibitions	<u>Y</u>	
	Subpart B – Monitoring Provisions	<u>Y</u>	
<u>75.10</u>	General Operating Requirements	<u>Y</u>	
<u>75.10(a)</u>	Primary Measurement Requirement	<u>Y</u>	
<u>75.10(a)(1)</u>	$\underline{SO_2}$ Emissions, except as provided in §§75.11 and 75.16 and subpart E	<u>Y</u>	
	of this part		

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>75.10(a)(2)</u>	NO _x Emissions, except as provided in §§75.12 and 75.17 and subpart E of this part	<u>Y</u>	
75.10(a)(3)	CO ₂ Emissions	<u>Y</u>	
<u>75.10(a)(3)</u>	<u>CO₂ Emissions estimated using Carbon Content of fuel and procedures</u>	<u>Y</u>	
(ii) 75.10 (a)(4)	in Appendix G. Opacity Monitoring, except as provided in <u>§§75.14</u> and 75.18	<u>Y</u>	
<u>75.10(a)(4)</u> 75.10(b)	Primary Equipment Performance Requirements	<u> </u>	
<u>75.10(c)</u>	Heat Input Rate Measurement Requirement	<u><u> </u></u>	
<u>75.10(d)</u>	Primary equipment hourly operating requirements	<u> </u>	
<u>75.10(d)(1)</u>	Cycles of operation for each 15 minute period. Hourly average calculated from a minimum of four 15 minute periods.	<u>Y</u>	
75.10(d)(3)	Validity of data and data substitution	<u>Y</u>	
<u>75.10(f)</u>	Minimum measurement capability requirement	<u>Y</u>	
<u>75.10(g)</u>	Minimum recording and recordkeeping requirements	<u>Y</u>	
<u>75.11</u>	Specific provisions for monitoring SO ₂ emissions	<u>Y</u>	
<u>75.11(d)</u>	Gas-fired and oil-fired units	<u>Y</u>	
<u>75.11(d)(2)</u>	Allows the use of Appendix D Optional SO ₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units to monitor SO ₂ emissions.	<u>Y</u>	
75.12	Specific provisions for monitoring NO _x emission rate	<u>Y</u>	
75.12(a)	NO _x continuous emission monitor and diluent monitoring requirement	<u>Y</u>	
75.12(c)	NO _x mass emission rate determination according to Appendix F	<u>Y</u>	
75.13	Specific provisions for monitoring CO ₂ emissions	Y	
75.13(b)	Determination of CO ₂ emissions using Appendix G	<u>Y</u>	
75.14	Specific Provisions for monitoring opacity	Y	
<u>75.14(c)</u>	Gas-Fired Units Exempt from Opacity Monitoring	<u>Y</u>	
	Subpart C – Operation and Maintenance Requirements	<u>Y</u>	
75.20	Initial certification and recertification procedures	<u>Y</u>	
<u>75.20(a)</u>	Initial certification and approval process	<u>Y</u>	
<u>75.20(b)</u>	Recertification approval process	<u>Y</u>	
<u>75.20(c)</u>	Initial certification and recertification procedures	<u>Y</u>	
<u>75.20(g)</u>	Initial certification and recertification procedures for excepted monitoring systems under appendices D and E	<u>Y</u>	
75.21	Quality assurance and quality control requirements	<u>Y</u>	

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>75.21(a)</u>	Continuous emission monitoring systems	<u>Y</u>	
<u>75.21(c)</u>	Calibration gases	<u>Y</u>	
<u>75.21(d)</u>	Notification for periodic Relative Accuracy Test Audits	<u>Y</u>	
<u>75.21(e)</u>	Consequences of audits	<u>Y</u>	
75.22	Reference test methods	<u>Y</u>	
75.24	Out-of-control periods and adjustment for system bias	<u>Y</u>	
	Subpart D – Missing Data Substitution Procedures	<u>Y</u>	
75.30	General Provisions	<u>Y</u>	
<u>75.30(a)</u>	Owner/operator shall provide substitute data for each affected unit using	Y	
	a continuous emission monitor according to this subpart whenever the unit is combusting fuel.		
75.31	Initial missing data procedures	Y	
75.32	Determination of monitor data availability for standard missing data procedures	<u>Y</u>	
75.33	Standard missing data procedures for SO, NO, Hg, and flow rate	<u>Y</u>	
<u>75.33(a)</u>	Following initial certification and after following initial missing data procedures for 2,160 quality assured operating hours for NO_x continuous emissions monitors system the owner/operator shall follow	<u>Y</u>	
	the data substitution procedures in paragraph (b) and (c) of this section.		
<u>75.33(c)</u>	Volumetric flow rate, NO _x emission rate and NO _x concentration data	<u>Y</u>	
<u>75.34</u>	Units with add-on emission controls	<u>Y</u>	
<u>75.35</u>	Missing data procedures for CO ₂	<u>Y</u>	
<u>75.36</u>	Missing data procedures for heat input rate determinations	<u>Y</u>	
	Subpart F - Recordkeeping Requirements	<u>Y</u>	
<u>75.53</u>	Monitoring plan	<u>Y</u>	
<u>75.53(a)</u>	General provisions	<u>Y</u>	
<u>75.53(b)</u>	Updates to monitoring plan	<u>Y</u>	
<u>75.53(e)</u>	Contents of monitoring plan	<u>Y</u>	
<u>75.53(f)</u>	Contents of monitoring plan for specific situations	<u>Y</u>	
<u>75.53(g)</u>	Contents of the monitoring plan after January 1, 2009	<u>Y</u>	
<u>75.53(h)</u>	Contents of monitoring plan for specific situations	<u>Y</u>	
<u>75.57</u>	General recordkeeping provisions	<u>Y</u>	
<u>75.57(a)</u>	General recordkeeping provisions for affected sources	<u>Y</u>	

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>75.57(b)</u>	Operating parameter record provisions. The owner or operator shall	<u>Y</u>	
	record for each hour the following information on unit operating time,		
	heat input rate, and load, separately for each affected unit.		
<u>75.57(c)</u>	SO ₂ emission record provisions	<u>Y</u>	
<u>75.57(d)</u>	<u>NO_x emission record provisions</u>	<u>Y</u>	
<u>75.57(e)</u>	CO ₂ emission record provisions	<u>Y</u>	
<u>75.57(g)</u>	Diluent record provisions	<u>Y</u>	
<u>75.57(h)</u>	Missing data records	<u>Y</u>	
75.58	General recordkeeping provisions for specific situations	<u>Y</u>	
75.58(b)	Specific parametric data record provisions for calculating substitute	<u>Y</u>	
	emissions data for units with add-on emission controls		
75.58(c)	Specific SO ₂ emission record provisions for gas-fired or oil-fired units	Y	
	using optional protocol in appendix D to this part. In lieu of recording		
	the information in §75.57(c), the owner or operator shall record the		
	applicable information in this paragraph for each affected gas-fired or		
	oil-fired unit for which the owner or operator is using the optional		
	protocol in appendix D to this part for estimating SO ₂ mass emissions		
<u>75.59</u>	Certification, quality assurance, and quality control record provisions	<u>Y</u>	
<u>75.59(a)</u>	Continuous emission or opacity monitoring systems	<u>Y</u>	
<u>75.59(b)</u>	Excepted monitoring systems for gas-fired and oil-fired units. The	<u>Y</u>	
	owner or operator shall record the applicable information in this section		
	for each excepted monitoring system following the requirements of		
	appendix D to this part or appendix E to this part for determining and		
	recording emissions from an affected unit.		
<u>75.59(c)</u>	Except as otherwise provided in $(55.58(b)(3)(i))$, units with add-on SO ₂	<u>Y</u>	
	or NO _x emission controls following the provisions of §75.34(a)(1) or		
	(a)(2), and for units with add-on Hg emission controls, the owner or		
	operator shall keep the following records on-site in the quality		
	assurance/quality control plan required by section 1 of appendix B to		
	this part:		

Table IV – A Source-specific Applicable Requirements S-3, S-4, S-5, GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>75.59(f)</u>	DAHS Verification. For each DAHS (missing data and formula)	<u>Y</u>	
	verification that is required for initial certification, recertification, or for	_	
	certain diagnostic testing of a monitoring system, record the date and		
	hour that the DAHS verification is successfully completed. (This		
	requirement only applies to units that report monitoring plan data in		
	accordance with §75.53(g) and (h).)		
	Subpart G – Reporting Requirements	<u>Y</u>	
75.60	General Provisions	<u>Y</u>	
<u>75.61</u>	Notifications	<u>Y</u>	
75.62	Monitoring plan submittals	<u>Y</u>	
75.63	Initial certification or recertification application	<u>Y</u>	
75.64	Quarterly reports	<u>Y</u>	
75.66	Petitions to the administrator	<u>Y</u>	
BAAQMD			
Condition			
#18102			
Definitions	Definitions	Y	
part 12	Consistency with analyses (2-1-403)	Y	
part 13	Conflicts between conditions (1-102)	Y	
part 14	Reimbursement of costs (2-1-303)	Y	
part 15	Access to Records and Facilities (1-440, 1-441)	Y	
part 17	Operations (2-1-307)	Y	
part 18	Visible emissions (6-301)	Y	
Part 19	Emission Limits		
Part 19.1	Emission Limit for NO _x (BACT)	Y	
Part 19.2	Emission Limit for ammonia (BACT)	Ν	
Part 19.3	Emission Limit for carbon monoxide (BACT)	Y	
Part 19.4	Emission Limit for precursor organic compounds (BACT)	Y	
Part 19.5	Emission Limit for PM ₁₀ (BACT, cumulative increase)	Y	
Part 19.6	Emission Limit for SOX (BACT, cumulative increase)	Y	
Part 20	Turbine Startup (cumulative increase)	Y	
Part 21	Turbine Shutdown (cumulative increase)	Y	
Part 22	Mass emission limits (cumulative increase)	Y	
part 23	Operational Limits (cumulative increase)	Y	

Table IV – ASource-specific Applicable RequirementsS-3, S-4, S-5, GAS TURBINES

		Federally	Future
Applicable Requirement	Regulation Title or Description of Requirement	Enforceable (Y/N)	Effective Date
part 24	Monitoring requirements (Cumulative Increase, BACT, 40 CFR 75, 40 CFR 60)	Y	Duit
part 25	Source testing/RATA (40 CFR 60, BAAQMD Manual of Procedures Volume IV)	Y	
part 26	Quality assurance program (40 CFR Part 75, Appendix B and 40 CFR Part 60, Appendix F)	Y	
part 27	Compliance with 40 CFR 60, Subpart GG (NSPS)	Y	
part 28	Breakdowns (1-208)	Y	
part 29	Breakdown reports (1-208)	Y	
part 30a	Records of fuel use and heat input (cumulative increase)	Y	
part 30b	Records of startups, shutdowns, and malfunctions (BACT, cumulative increase)	Y	
part 30c	Records of emission measurements (BACT, cumulative increase, 40 CFR 60, 40 CFR 75)	Y	
part 30d	Records of hours of operation (cumulative increase)	Y	
part 30e	Records of NO _x , CO, and ammonia emissions (BACT)	Y	
part 30f	Records of continuous emission monitoring systems (1-522)	Y	
part 31	Records retention for five years (2-6-501)	Y	
part 32a	Reports of fuel use and heat input (cumulative increase)	Y	
part 32b	Reports of mass emission rates (BACT, cumulative increase)	Y	
part 32c	Reports of excess emissions (BACT, cumulative increase)	Y	
part 32d	Reports of nature and cause of excess emissions (BACT, cumulative increase)	Y	
part 32e	Reports of continuous emission monitoring systems downtime (1-522)	Y	
part 32f	Negative declarations (BACT, cumulative increase)	Y	
part 32g	Reports of fuel analyses (cumulative increase, 40 CFR 75)	Y	
part 34	District Operating permit (2-2, 2-6)	Y	

This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

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		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 1	General Provisions and Definitions (7/9/085/2/01)		
1-431	Breakdown Report	Y	
1-432	Written Breakdown Report	Y	
1-433	Determination of Breakdown	Y	
1-520	Continuous Emission Monitoring	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	Plans and Specifications	Y	
1-522.2	Installation Scheduling	Y	
1-522.3	Performance Testing	Y	
1-522.4	Periods of Inoperation Greater Than 24 Hours	Y	
1-522.5	Calibration	Y	
1-522.6	Accuracy	Y	
1-522.7	Excesses	Y	
1-522.8	Monthly Reports	Y	
1-522.9	Records	Y	
1-522.10	Monitors Required by Sections 1-521 or 2-1-403	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-602	Area and Continuous Emission Monitoring Requirements	N	
SIP	General Provisions and Definitions (6/28/99)		
Regulation			
1			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y ¹	
1-522.7	Emission limit exceedance reporting requirements	Y ¹	
BAAQMD			
Regulation 2,	Regulation 2, Rule 1 – Permits, General Requirements (7/19/06-8/1/01)		
Rule 1			
2-1-501	Monitors	Y	
BAAQMD	Particulate Matter and Visible Emissions (<u>12/5/07</u> 12/19/90)		
Regulation 6			
6- <u>1-</u> 301	Ringelmann Number 1 Limitation	<u>N</u> ¥	
6- <u>1-</u> 305	Visible Particles	<u>N</u> ¥	
6- <u>1-</u> 310 <u>.3</u>	Particulate Weight Limitation	N¥	
6- <u>1-</u> 401	Appearance of Emissions	<u>N</u> ¥	

Table IV-B S-100 – GAS TURBINE

Table IV-BS-100 – GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
<u>SIP</u>	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6		X	
<u>6-301</u>	Ringelmann Number 1 Limitation	<u>Y</u>	
<u>6-305</u>	Visible Particles	<u>Y</u>	
<u>6-310.3</u>	Particulate Weight Limitation	<u>Y</u>	
<u>6-401</u> BAAQMD	Appearance of Emissions	<u>Y</u>	
Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas		
Regulation 9, Rule 9	<u>Turbines (12/6/06)</u>		
9-9-113	Exemption – Inspection/Maintenance	N	
<u>9-9-114</u>	Exemption – Start-Up/Shutdown	<u>N</u>	
9-9-301	Emission Limits – General	<u>N</u>	
9-9-301.1.2	Emission Limits – General Emission Limits – Turbines Rated ≥ 10 MW no SCR,	<u>N</u>	
<u>9-9-301.2</u>	Emission Limits, General, > 500 MMBtu/hr, 0.15 lbs/MWhr or 5 ppmy	<u>N</u>	<u>1/1/2012</u>
9-9-401	Certification, Efficiency	<u>N</u>	1111011
9-9-501	Monitoring and recordkeeping requirements	N	
<u>SIPBAAQM</u> Ð	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (<u>12/15/979/21/94</u>)		
Regulation 9, Rule 9			
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	
9-9-305	Emission Limits, Existing Low-NO _x Turbines	Y	
9-9-401	Certification, Efficiency	Y	
9-9-501	Monitoring and recordkeeping requirements	Y	
BAAQMD	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
Manual of			
Procedures,			
Volume V			
40 CFR 60	Standards of Performance for New Stationary Sources (12/23/71)	Y	
Subpart A	General Provisions	Y	
60.4(b)	Reports to EPA and District	¥	

Table IV-BS-100 – GAS TURBINE

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
60.7 (a)	Written notificationNotification and Recordkeeping	Y	
60.7(b)	Records	¥	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards in this partand 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	
40 CFR 60 Appendix B	Performance Specifications	Y	
Performance Specification 2	Specifications and test procedures for SO_2 and NO_x continuous emission monitoring systems in stationary sources	Y	
Performance Specification 3	Specifications and test procedures for O ₂ and CO ₂ continuous emission monitoring systems	Y	
40 CFR 60	Quality Assurance Procedures		
Appendix F			
Procedure 1	Quality assurance requirements for gas continuous emission monitoring systems used for compliance determination	Y	
Subpart GG	Standards of Performance for Stationary Gas Turbines (2/24/061/27/82)		
60.330	Applicability and designation of affected facility	Y	
<u>60.330(a)</u>	All stationary gas turbines with a heat input greater than 10 MMBtu/hour.	<u>Y</u>	
<u>60.330(b)</u>	Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of §60.332.	Y	
<u>60.332</u>	Standard for nitrogen oxides	<u>Y</u>	
60.332(a)(1)	NO _x limit	Y	
60.332(a)(3)	Choice of "F" values available (either NO _* emission allowance for fuel- bound nitrogen or zero) to owner/operator to use in equation in Section 60.332(a)(1)	¥	
60.332(a)(4)	Definition of "F" value if the owner/operator elects the NO _* emission allowance for fuel bound nitrogen option.	¥	
60.333	Performance Standards, SO2Standard for sulfur dioxide	Y	
<u>60.333(a)</u>	SO ₂ Concentration < 0.015 percent @15% O ₂ (Turbine Only)	Y	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.333(b)	Fuel Sulfur Content cannot exceed 0.8 percent by weight (Turbine Only)	<u>Y</u>	
<u>60.334</u>	Monitoring of operations		
60.334(b)	Requirements for CEMS consisting of NOx and O2 monitors installed at	Y	
00.554(0)	turbines which use steam injection that were constructed, reconstructed, or	1	
	modified after October 3, 1977, but before July 8, 2004		
60.334(c)	For any turbine that commenced construction, reconstruction or	<u>Y</u>	After
	modification after October 3, 1977, but before July 8, 2004, and which	_	installation
	does not use steam or water injection to control NOx emissions, the		of dry Low
	owner/operator may, but is not required to, for purposes of determining		NOx
	excess emissions, use a CEMS that meet the requirements of paragraph (b)		combustors
	of this section. If the owner/operator has previously submitted and		(1/1/2012)
	received EPA, State, or local permitting authority approval of a procedure		
	for monitoring compliance with the applicable NOx emission limit under		
	60.332 that approved procedure may continue to be used.		
60.334(h)(1)	Requirements for monitoring total sulfur content of fuel fired in turbines.	Y	
	except as provided in paragraph (h)(3) of this section.		
60.334(h)(3)	Options available to owner/operator to discontinue total sulfur content	Y	
	monitoring Exemption from sulfur fuel monitoring requirements (Natural		
	<u>Gas)</u>		
60.334(i)(2)	Frequency (once per unit operating day) of determining the sulfur and	¥	
	nitrogen content of the gaseous fuel fired in the turbines		
60.334	Nitrogen oxides:	Y	
(j)(1)(iii)	Excess emissions and monitor downtime reporting requirements for		
	turbines using NO _x and diluent CEMS		
60.334	Sulfur Dioxide:	¥	
(j)(2)(i)	(Applicable only if owner or operator is required to monitor sulfur content		
	of fuel per Section 60.334(h))		
	Excess emissions		
60.334	Sulfur Dioxide:	¥	
(j)(2)(iii)	Fuel sulfur content monitor downtime		
60.334(j)(5)	Postmarking requirements for reports	¥	
60.335	Test Methods and Procedures	Y	
BAAQMD	Continuous Emission Monitoring Policy and Procedures (1/20/82)	¥	
Manual of			
Procedures,			
Volume V			
40 CFR 72	Title IV - Acid Rain Program	Y	
	Subpart A – Acid Rain Program General Requirements		

Table IV-BS-100 – GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
<u>72.6</u>	Applicability	<u>Y</u>	
72.6(a)(3)	New utility unit (at the time of commencement of commercial operation)	<u>Y</u>	
<u>72.9</u>	Standard Requirements	<u>Y</u>	
<u>72.9(a)</u>	Permit Requirements	<u>Y</u>	
72.9(a)(1)(i)	Submittal of a complete acid rain permit application	<u>Y</u>	
72.9(a)(1)(iii)	Submittal of information in a timely manner	<u>Y</u>	
72.9(a)(2)(i)	Operation in compliance with Acid Rain permit	<u>Y</u>	
72.9(a)(2)(ii)	Have an Acid Rain Permit	<u>Y</u>	
<u>72.9(b)</u>	Monitoring Requirements	<u>Y</u>	
72.9(c)	Sulfur Dioxide Requirements	<u>Y</u>	
72.9(c)(1)	Requirement to hold allowances as of allowance transfer deadline	<u>Y</u>	
72.9(c)(2)	Each ton of excess SO ₂ emissions is a separate violation of the CAA	<u>Y</u>	
72.9(c)(3)	Initial deadline to hold allowances	<u>Y</u>	
72.9(c)(3)(iv)	Deadline at time of monitor certification	<u>Y</u>	
<u>72.9(c)(4)</u>	Use of Allowance Tracking System	<u>Y</u>	
72.9(c)(5)	Allowances may not be deducted prior to year for which allowance was	<u>Y</u>	
	allocated		
72.9(c)(6)	Limited authorization	<u>Y</u>	
<u>72.9(d)</u>	Nitrogen Oxide Requirements	<u>Y</u>	
72.9(e)	Excess emissions requirements	<u>Y</u>	
<u>72.9(f)</u>	Recordkeeping and Reporting Requirements	<u>Y</u>	
72.9(<u>g)</u>	Liability	<u>Y</u>	
72.9(h)	Effect on Other Authorities	<u>Y</u>	
	Subpart C – Acid Rain Permit Applications		
72.30(a)	Requirement to apply	<u>Y</u>	
72.30(c)	Duty to reapply. Requirement to submit complete acid rain application 6	<u>Y</u>	
	months prior to expiration of current acid rain permit.		
72.31	Information requirements for Acid Rain permit applications	<u>Y</u>	
72.31(a)	Identification of affected source	<u>Y</u>	
72.31(b)	Identification of each affected emissions unit	Y	
72.31(c)	Complete compliance plan	<u>Y</u>	
72.31(d)	Standard requirements under 40 CFR 72.9	<u><u> </u></u>	

Table IV-BS-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>72.31(e)</u>	If the Acid Rain permit application is for Phase II and the unit is a new	<u>Y</u>	
	unit, the date that the unit has commenced or will commence operation		
	and the deadline for monitor certification.		
72.32	Permit application shield and binding effect of permit application	<u>Y</u>	
	Subpart E – Acid Rain Permit Contents		
72.50	General	<u>Y</u>	
72.50(a)	Acid Rain Permits	<u>Y</u>	
72.50(a)(1)	Permits must contain all elements of complete Acid Rain Application	<u>Y</u>	
72 50(h)	under 40 CFR 72.31	V	
<u>72.50(b)</u> 72.51	Permits include terms in 40 CFR 72.2	<u>Y</u> V	
	Permit Shield Code of Federal Regulations, Continuous Emissions Monitoring	<u>Y</u> Y	
40 CFR Part 75	Code of Federal Regulations, Continuous Emissions Monitoring	1	
	Subpart A – General	<u>Y</u>	
75.2	Applicability	<u>Y</u>	
<u>75.2(a)</u>	Applicability to affected units subject to Acid Rain emission limitations	<u>Y</u>	
75.4	Compliance Dates	<u>Y</u>	
<u>75.4(b)</u>	New affected unit (at the time of the commencement of commercial	<u>Y</u>	
	operation) shall ensure that all monitoring systems required under this part		
	for monitoring of SO ₂ , NO _x , CO ₂ , opacity, and volumetric flow are		
	installed and all certification tests are completed on or before the later of the following dates		
75.4(b)(2)	The earlier of 90 unit operating days or 180 calendar days after the date the	<u>Y</u>	
	unit commences commercial operation, notice of which date shall be		
	provided under subpart G of this part.		
<u>75.5</u>	Prohibitions	<u>Y</u>	
	Subpart B – Monitoring Provisions	<u>Y</u>	
75.10	General Operating Requirements	<u>Y</u>	
75.10(a)	Primary Measurement Requirement	<u>Y</u>	
75.10(a)(1)	SO ₂ Emissions, except as provided in §§75.11 and 75.16 and subpart E of this part	<u>Y</u>	
75.10(a)(2)	this part NO _x Emissions, except as provided in §§75.12 and 75.17 and subpart E of	<u>Y</u>	
75.10(a)(3)	this part CO ₂ Emissions	<u>Y</u>	

Table IV-BS-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.10(a)(3)	CO2 Emissions estimated using Carbon Content of fuel and procedures in	<u>Y</u>	
<u>(ii)</u>	Appendix G.		
<u>75.10 (a)(4)</u>	Opacity Monitoring, except as provided in §§75.14 and 75.18	<u>Y</u>	
<u>75.10(b)</u>	Primary Equipment Performance Requirements	<u>Y</u>	
<u>75.10(c)</u>	Heat Input Rate Measurement Requirement	<u>Y</u>	
<u>75.10(d)</u>	Primary equipment hourly operating requirements	<u>Y</u>	
<u>75.10(d)(1)</u>	Cycles of operation for each 15 minute period. Hourly average calculated from a minimum of four 15 minute periods.	Y	
75.10(d)(3)	Validity of data and data substitution	<u>Y</u>	
75.10(f)	Minimum measurement capability requirement	<u>Y</u>	
75.10(g)	Minimum recording and recordkeeping requirements	<u>Y</u>	
75.11	Specific provisions for monitoring SO ₂ emissions	<u>Y</u>	
75.11(d)	Gas-fired and oil-fired units	<u>Y</u>	
75.11(d)(2)	Allows the use of Appendix D Optional SO ₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units to monitor SO ₂ emissions.	<u>Y</u>	
75.12	Specific provisions for monitoring NO _x emission rate	<u>Y</u>	
75.12(a)	NO _x continuous emission monitor and diluent monitoring requirement	Y	
75.12(c)	NO _x mass emission rate determination according to Appendix F	<u>Y</u>	
75.13	Specific provisions for monitoring CO ₂ emissions	<u>Y</u>	
75.13(b)	Determination of CO ₂ emissions using Appendix G	<u>Y</u>	
75.14	Specific Provisions for monitoring opacity	<u>Y</u>	
75.14(c)	Gas-Fired Units Exempt from Opacity Monitoring	<u>Y</u>	
	Subpart C – Operation and Maintenance Requirements	<u>Y</u>	
75.20	Initial certification and recertification procedures	<u>Y</u>	
75.20(a)	Initial certification and approval process	<u>Y</u>	
75.20(b)	Recertification approval process	<u>Y</u>	
75.20(c)	Initial certification and recertification procedures	<u>Y</u>	
75.20(g)	Initial certification and recertification procedures for excepted monitoring systems under appendices D and E	<u>Y</u>	
75.21	Quality assurance and quality control requirements	<u>Y</u>	
<u>75.21(a)</u>	Continuous emission monitoring systems	<u>Y</u>	
75.21(c)	Calibration gases	<u>Y</u>	
<u>75.21(d)</u>	Notification for periodic Relative Accuracy Test Audits	<u>Y</u>	
75.21(e)	Consequences of audits	<u>Y</u>	

Table IV-BS-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>75.22</u>	Reference test methods	<u>Y</u>	
75.24	Out-of-control periods and adjustment for system bias	<u>Y</u>	
	Subpart D – Missing Data Substitution Procedures	<u>Y</u>	
75.30	General Provisions	<u>Y</u>	
75.30(a)	Owner/operator shall provide substitute data for each affected unit using a	<u>Y</u>	
	continuous emission monitor according to this subpart whenever the unit is combusting fuel.		
75.31	Initial missing data procedures	Y	
75.32	Determination of monitor data availability for standard missing data	Y	
10102	procedures	<u> </u>	
75.33	Standard missing data procedures for SO, NO, Hg, and flow rate	<u>Y</u>	
75.33(a)	Following initial certification and after following initial missing data	<u>Y</u>	
	procedures for 2,160 quality assured operating hours for NO _x continuous	_	
	emissions monitors system the owner/operator shall follow the data		
75.22(-)	substitution procedures in paragraph (b) and (c) of this section.	V	
<u>75.33(c)</u>	Volumetric flow rate, NO _x emission rate and NO _x concentration data	<u>Y</u>	
<u>75.34</u>	Units with add-on emission controls	<u>Y</u>	
<u>75.35</u>	Missing data procedures for CO ₂	<u>Y</u>	
75.36	Missing data procedures for heat input rate determinations	<u>Y</u>	
	Subpart F – Recordkeeping Requirements	<u>Y</u>	
75.53	Monitoring plan	<u>Y</u>	
75.53(a)	General provisions	<u>Y</u>	
<u>75.53(b)</u>	Updates to monitoring plan	<u>Y</u>	
75.53(e)	Contents of monitoring plan	<u>Y</u>	
75.53(f)	Contents of monitoring plan for specific situations	<u>Y</u>	
<u>75.53(g)</u>	Contents of the monitoring plan after January 1, 2009	<u>Y</u>	
<u>75.53(h)</u>	Contents of monitoring plan for specific situations	<u>Y</u>	
75.57	General recordkeeping provisions	<u>Y</u>	
75.57(a)	General recordkeeping provisions for affected sources	<u>Y</u>	
<u>75.57(b)</u>	Operating parameter record provisions. The owner or operator shall	<u>Y</u>	
	record for each hour the following information on unit operating time, heat		
	input rate, and load, separately for each affected unit.		
<u>75.57(c)</u>	SO ₂ emission record provisions	<u>Y</u>	
<u>75.57(d)</u>	NO _x emission record provisions	Y	

Table IV-BS-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>75.57(e)</u>	CO ₂ emission record provisions	<u>Y</u>	
75.57(g)	Diluent record provisions	<u>Y</u>	
75.57(h)	Missing data records	<u>Y</u>	
75.58	General recordkeeping provisions for specific situations	<u>Y</u>	
<u>75.58(b)</u>	Specific parametric data record provisions for calculating substitute emissions data for units with add-on emission controls	<u>Y</u>	
<u>75.58(c)</u>	Specific SO ₂ emission record provisions for gas-fired or oil-fired units using optional protocol in appendix D to this part. In lieu of recording the information in $575.57(c)$, the owner or operator shall record the applicable information in this paragraph for each affected gas-fired or oil-fired unit for which the owner or operator is using the optional protocol in appendix D to this part for estimating SO ₂ mass emissions	Ϋ́	
75.59	Certification, quality assurance, and quality control record provisions	Y	
75.59(a)	Continuous emission or opacity monitoring systems	<u>Y</u>	
<u>75.59(b)</u>	Excepted monitoring systems for gas-fired and oil-fired units. The owner or operator shall record the applicable information in this section for each excepted monitoring system following the requirements of appendix D to this part or appendix E to this part for determining and recording emissions from an affected unit.	Ϋ́	
<u>75.59(c)</u>	Except as otherwise provided in $\$75.58(b)(3)(i)$, units with add-on SO ₂ or NO _x emission controls following the provisions of $\$75.34(a)(1)$ or $(a)(2)$, and for units with add-on Hg emission controls, the owner or operator shall keep the following records on-site in the quality assurance/quality control plan required by section 1 of appendix B to this part:	Y	
<u>75.59(f)</u>	DAHS Verification. For each DAHS (missing data and formula) verification that is required for initial certification, recertification, or for certain diagnostic testing of a monitoring system, record the date and hour that the DAHS verification is successfully completed. (This requirement only applies to units that report monitoring plan data in accordance with §75.53(g) and (h).)	Ϋ́	
	Subpart G – Reporting Requirements	<u>Y</u>	
<u>75.60</u>	General Provisions	<u>Y</u>	
<u>75.61</u>	Notifications	<u>Y</u>	
75.62	Monitoring plan submittals	<u>Y</u>	
75.63	Initial certification or recertification application	<u>Y</u>	

Table IV-BS-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>75.64</u>	Quarterly reports	<u>Y</u>	
75.66	Petitions to the administrator	<u>Y</u>	
BAAQMD Cond# 2780			
Part 1a(i)	BACT NO _x Limit (basis: BACT, PSD)	Y	
Part 1a(ii)	NO _x Limit for Dry Low NO _x combustor that must be installed by January 1, 2012. (basis: 9-9-301.2)	Ν	Installation Date Combustors to be operational by 1/1/12
Part 1b(i)	Startup and shutdowns (basis: BACT)	Y	
Part 1b(ii)	Startup and shutdowns after Dry Low NO _x combustors are installed. (Basis: 9-9-217, 9-9-218)	N	Installation Date Combustors to be operational by 1/1/12
Part 1c	Steam Injection (basis: BACT, PSD)	¥	NA after installation date
Part 1e	RACT NO _x limit adjusted for capacity increase and efficiency (basis: 2-2-604, SIP 9-9-113, SIP 9-9-114, SIP 9-9-305, SIP 9-9-401)	Y	
Part 1f	Annual NO _x limit (basis: BACT, SIP 9-9-305, 2-2-604)	Y	
Part 1g	Daily NO _x limit (basis: 2-2-301)	Y	
Part 3a	CO control requirement (basis: BACT)	Y	
Part 3b	Annual CO emission limit (basis: BACT)	Y	
Part 3c	CO concentration limit (basis: BACT)	Y	
Part 3d	CO emissions during Startup and shutdown periods (basis: BACT)	Y	
Part 3e	CO emissions during operation at less than 80 percent load (basis: BACT)	Y	
part 3f	CO emissions during operation at low ambient temperature (basis: BACT)	Y	
Part 4	Individual boiler NO _x concentration limit averaged over a 3-hour period (basis: PSD, BACT)	Y	
part 6	NMHC/TSP Limit (basis: Cumulative increase)	Y	

Table IV-BS-100 – GAS TURBINE

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
part 8	Steam Injection (basis: BACT)	¥	NA after
			installation
			date
Part 9a	Continuous Emission Monitoring (basis: PSD, 2-1-403)	¥	NA after
			installation
			date
Part 9b	Continuous Monitoring of Fuel Fired (basis: PSD, 2-1-403)	Y	Installation
			date
			Combustors
			to be
			operational
			<u>by 1/1/12</u>
part 11	CEM requirement (basis: PSD, BACT, 2-1-403)	Y	
part 13a	Stack height (basis: PSD)	Y	
part 13b	Sampling ports (basis: BAAQMD 1-501)	Y	
part 14	Recordkeeping (basis: PSD, BACT)	Y	
part 18	Hours of Operation (basis: Cumulative increase)	Y	
BAAQMD	PSD Permit		
Condition			
# 21961			
III	Facilities Operation	Y	
V	Right to Entry	Y	
VI	Transfer of Ownership	Y	
VII	Severability	Y	
VIII	Other Applicable Regulations	Y	
IX, B	Air Pollution Control Equipment	Y	
IX, B(i)	Air Pollution Control Equipment until the installation of the Dry Low NO_{\star}	¥	NA after
	combustors.		installation
			date
IX, B(ii)	Air Pollution Control Equipment after the installation of the Dry Low NO_{x}	Ν	Installation
	combustors.		date
			Combustors
			to be
			operational
			<u>by 1/1/12</u>

Table IV-BS-100 – GAS TURBINE
Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
IX, C	Emission Limits for NO _x	Y	
IX, D	Performance Tests	Y	
IX, E	Continuous Emission Monitoring	Y	
IX, E, 1(a)	Continuous Emission Monitoring until the installation of the Dry Low	¥	NA after
	NO _* combustors.		installation
			date
IX, E, 1(b)	Continuous Emission Monitoring after the installation of the Dry Low NO_x	Ν	Installation
	combustors.		date
			Combustors
			to be
			operational
			<u>by 1/1/12</u>
IX, G	New Source Performance Standards	Y	

Table IV-BS-100 – GAS TURBINE

¹ This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 1	General Provisions and Definitions (7/9/0811/3/93)		
1-431	Breakdown Report	Y	
1-432	Written Breakdown Report	Y	
1-433	Determination of Breakdown	Y	
1-520	Continuous Emission Monitoring	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	Plans and Specifications	Y	
1-522.2	Installation Scheduling	Y	
1-522.3	Performance Testing	Y	
1-522.4	Periods of Inoperation Greater Than 24 Hours	Y	
1-522.5	Calibration	Y	
1-522.6	Accuracy	Y	
1-522.7	Excesses	Y	
1-522.8	Monthly Reports	Y	
1-522.9	Records	Y	
1-522.10	Monitors Required by Sections 1-521 or 2-1-403	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
SIP	General Provisions and Definitions (6/28/99)		
Regulation 1			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y^1	
1-522.7	Emission limit exceedance reporting requirements	Y^1	
BAAQMD			
Regulation 2,	Regulation 2, Rule 1 - Permits, General Requirements		
Rule 1	(<u>7/19/068/1/01</u>)		
2-1-501	Monitors	<u>Y</u> N	
BAAQMD	Particulate Matter and Visible Emissions (12/5/07)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	

Table IV-CS-101, S-102 – BOILERS

Table IV-CS-101, S-102 – BOILERS

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
<u>6-1-310.3</u>	Heat transfer equipment	<u>N</u>	
<u>6-1-401</u>	Appearance of Emissions	<u>N</u>	
SIPBAAQM D Regulation 6	Particulate Matter and Visible Emissions (<u>9/4/9812/19/90)</u>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat transfer equipment	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon		
Regulation 9 ,	Monoxide from Industrial, Institutional, and Commercial		
Rule 7	Boilers, Steam Generators, and Process Heaters (7/30/08)		
<u>9-7-301</u>	Emission Limits-Gaseous Fuel	<u>N</u>	
<u>9-7-301.1</u>	Emission Limits NO _x	<u>N</u>	
<u>9-7-301.4</u>	Emission Limits CO	<u>N</u>	
<u>9-7-307.6</u>	Emission Limit NO _x	N	<u>1/1/2014 1st</u> <u>Unit,</u> <u>1/1/2015 2nd</u> <u>Unit</u>
9-7-503	Records	N	
9-7-503.3	Records of equipment testing	N	
9-7-503.4	Source test records	N	
9-7-603	Compliance Determination	N	
SIPBAAQM D Regulation 9,	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (9/15/93)		
Rule 7			
9-7-301	Emission Limits-Gaseous Fuel	Y	
9-7-301.1	Emission Limits-NO _x	Y	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
9-7-301.2	Emission Limits-CO	Y	
9-7-303	Emission Limits-Gaseous Fuels-and Non-Gaseous Fuel	Y	
9-7-503	Records	Y	
9-7-503.3	Records of equipment testing	Y	
9-7-503.4	Source test records	Y	
9-7-603	Compliance Determination	Y	
BAAQMD	Continuous Emission Monitoring Policy and Procedures		
Manual of	(1/20/82)		
Procedures,			
Volume V			
40 CFR 60	Standards of Performance for New Stationary Sources (12/23/71)	Y	
Subpart A	General Provisions	Y	
60.4(b)	Reports to EPA and District	¥	
60.7 (a)	Written notificationNotification and record keeping	Y	
60.7(b)	Records	¥	
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	¥	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
40 CFR 60 Appendix B	Performance Specifications	Y	
Performance Specification 2	Specifications and test procedures for SO ₂ and NO _x continuous emission monitoring systems in stationary sources	Y	
Performance Specification 3	Specifications and test procedures for O ₂ and CO ₂ continuous emission monitoring systems	Y	
40 CFR 60 Appendix F	Quality Assurance Procedures		
Procedure 1	Quality assurance requirements for gas continuous emission monitoring systems used for compliance determination	Y	
Subpart Db	Standards of Performance for Industrial-Commercial- Institutional Steam Generating Units (12/16/87)	Y	

Table IV-C S-101, S-102 – BOILERS

Table IV-C S-101, S-102 – BOILERS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>60.40b</u>	Applicability and delegation of authority	(1)1)	Dutt
<u>60.40b(a)</u>	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).		
60.44b (a)(1)(ii)	NOx limit	¥	
<u>60.44b</u>	Standard for nitogen oxides (NOX)		
<u>60.44b(a)(4)</u>	NO _x Emission Limit	<u>Y</u>	
60.44b(h)	NO _x limit applicable at all times	Y	
60.44b(i)	Compliance: 24-hr day averaging period (per BAAQMD Regulation 10, part 4)basis	Y	
<u>60.46b</u>	Compliance and performance test methods and procedures for particulate matter and nitrogen oxides		
<u>60.46b(a)</u>	NO _x limits apply at all times	Y	
<u>60.46b(c)</u>	Compliance with NO _x limit	Y	
<u>60.46b(e)</u>	Performance test for NO _x	Y	
<u>60.48b</u>	Emission monitoring for particulate matter and nitrogen oxides		
<u>60.48b(b)</u>	CEMs for NO _x Standard, except as provided in (g), (h), and (i) of this section	Y	
<u>60.49b</u>	Reporting and recordkeeping requirements		
<u>60.49b(a)</u>	Notification of Initial Startup	Y	
<u>60.49b(b)</u>	Submittal of Performance Test Reports and CEM performance evaluation	Y	
<u>60.49b(d)</u>	Fuel records	Y	
<u>60.49b(g)</u>	Records for each day of operation	<u>Y</u>	
60.49b(h)(2)	Excess emission reports	Y	
<u>60.49b(o)</u>	Records retention for two years	Y	
BAAQMD Cond #2780			
part 3b	Annual CO emission limit (basis: BACT)	Y	
part 4	NO _x limit (basis: PSD, BACT)	Y	
part 6	NMHC/TSP Limit (basis: Cumulative increase)	Y	
part 11	CEM requirement (basis: PSD, BACT, 2-1-403)	Y	

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Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
part 13b	Sampling ports (BAAQMD 1-501)	Y	
part 14	Recordkeeping (basis: PSD, BACT)	Y	
part 18	Hours of Operation (basis: Cumulative increase)	Y	
BAAQMD	PSD Permit		
Condition			
# 21961			
III	Facilities Operation	Y	
V	Right to Entry	Y	
VI	Transfer of Ownership	Y	
VII	Severability	Y	
VIII	Other Applicable Regulations	Y	
IX, B	Air Pollution Control Equipment	Y	
IX, C	Emission Limits for NO _x	Y	
IX, D	Performance Tests	Y	

Table IV-CS-101, S-102 – BOILERS

¹ This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

Table IV-DS-104 – COOLING TOWER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter and Visible Emissions (12/5/07)		
Regulation 6			
<u>6-1-301</u>	Ringelmann Number 1 Limitation	<u>N</u>	
<u>6-1-305</u>	Visible Particles	<u>N</u>	
<u>6-1-310</u>	Particulate Weight Limitation	<u>N</u>	
<u>6-1-311</u>	General Operations	<u>N</u>	
<u>6-1-401</u>	Appearance of Emissions	<u>N</u>	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/5/07)		
<u>6-1-301</u>	Ringelmann Number 1 Limitation	N	
<u>6-1-305</u>	Visible Particles	<u>N</u>	
<u>6-1-310</u>	Particulate Weight Limitation	N	
<u>6-1-311</u>	General Operations	<u>N</u>	
<u>6-1-401</u>	Appearance of Emissions	<u>N</u>	
SIPBAAQM D Regulation 6	Particulate Matter and Visible Emissions (<u>9/4/9812/19/90</u>)		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	

Table IV-DS-104 – COOLING TOWER

<u>Table IV - E</u> Source-specific Applicable Requirements S-6 - EMERGENCY STANDBY FIRE PUMP: DIESEL ENGINE

Applicable Requirement BAAQMD	Regulation Title or Description of Requirement Particulate Matter and Visible Emissions (12/19/90)	Federally Enforceable (Y/N)	Future Effective Date
Regulation 6			
6-303	Ringelmann No. 2 Limitation	¥	
6-305	Visible Particles	¥	
6-310	Particulate Weight Limitation	¥	
6-401	Appearance of Emissions	¥	
BAAQMD	Inorganic Gascous Pollutants, Sulfur Dioxide (3/15/95)		
Regulation			
9, Rule 1			
9-1-301	Limitations on Ground Level Concentrations	¥	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	¥	

<u>Table IV - E</u> Source-specific Applicable Requirements S-6 - Emergency Standby Fire Pump: DieseL Engine</u>

		Federally	Future
Applicable	Regulation Title or Description of Requirement	Enforceable	Effective
Requirement		(Y/N)	Date
BAAQMD	Inorganic Gaseous Pollutants (8/1/01)		
Regulation			
9, Rule 8			
9-8-330	Emergency Standby Engines, Hours of Operation	N	
9-8-530	Emergency standby engines, monitoring and recordkeeping	N	

V. SCHEDULE OF COMPLIANCE

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

COND# 2780 ------

Any condition that is preceded by an asterisk is not federally enforceable.

Calpine Gilroy Cogen, L. P. Facility #B1180 PERMIT CONDITION #2780 (Amended August 29, 1987, June 27, 1989, September 13, 1990 [APPLICATION NO. 5140]; May, 1998 [Application #25841]; December, 1998 [Application #18872]; January, 2000 [Application #455]; November 2005 [Application # 13479]); December, 2010 [A#18434])

1a. (i) The oxides of nitrogen (NOx) concentration in the gas turbine exhaust shall not exceed 25 ppmvd at 15% oxygen averaged over any three-hour period. (BACT, PSD)

*(ii) Effective after the new Dry Low NOx combustor becomes operational, the oxides of nitrogen (NOx) concentration in the gas turbine exhaust shall not exceed 5 ppmvd at 15% oxygen or 0.15 lb/MW-hr averaged over any three-hour period excluding startup and shutdown periods. The Dry Low NOx combustor shall be installed at the next scheduled major maintenance or no later than January 1, 2012.

(Basis: 9-9-301.2)

1b. (i) The limit in part 1a(i) shall not apply during cold start-up, which is not to exceed four hours, or shutdown procedure, which is not to exceed two hours. However, for daily start-ups after a shutdown of twelve (12) hours or

less, the start-up period shall be limited to one (1) hour. (BACT)

*(ii) The limit in part 1a(ii) shall not apply during cold start-up, which is not to exceed four hours, or shutdown procedure, which is not to exceed two hours. However, for daily start-ups after a shutdown of twelve (12) hours or less, the start-up period shall be limited to one (1) hour. (BACT, 9-9-217, 9-9-218)

1c. <u>Deleted after DLN Operational on January 1, 2012.</u> During any mode of operation, the owner or operator

shall inject steam for NOx control at the turbine when steam

of specified pressure and temperature is available. This

- installed and operational.

(BACT, PSD)

1d. (Deleted under BAAQMD Application #445)

1e. Effective after startup of the modification proposed in Application #445, the oxides of nitrogen (NOx) concentration in the gas turbine exhaust shall not exceed 21.0 ppmvd at 15% oxygen averaged over any calendar day, excluding periods of startup or shutdown pursuant to <u>SIP</u> Regulation 9-9-114 or periods of inspection and maintenance pursuant to <u>SIP</u> Regulation 9-9-113.
(2-2-604, SIP 9-9-113, SIP 9-9-114, SIP 9-9-305, SIP 9-9-401)

1f. Mass emissions of NOx at S-100, Gas Turbine, shall not exceed 323.7 tons per any consecutive twelve months. The permit holder shall install current Best Available Control Technology if this limit is exceeded or if the permit holder applies for a limit exceeding this limit. (BACT, SIP 9-9-305, 2-2-604)

1g. Mass emissions of NOx at S-100, Gas Turbine, shall not exceed 1876 lb in any calendar day. (Regulation 2-2-301)

2. (Deleted under BAAQMD Title V application #25841)

3a. An oxidizing catalyst (A100) shall reduce CO emissions

from the gas turbine (S-100). The catalyst shall operate during all periods of turbine operation except during startup, which shall not exceed one hour for warm start, or four hours for a cold start. (9/98 BACT)

3b. Annual CO emissions shall not exceed 100 tons in any consecutive twelve months for sources S-100, S-101, and S-102. Sampling ports for testing for compliance with this condition shall be maintained as approved by the District's Source Test Section.

(6/27/89) (BACT)

3c. CO emissions in the gas turbine exhaust shall not exceed 10 ppmvd at 15% oxygen over any three- hour period. (9/98 BACT)

3d. The limit in part 3c shall not apply during startup and shutdown periods. Emissions during startup and shutdown periods shall be limited to 14670 lbs per any consecutive twelve months. (6/27/89 BACT)

3e. The limit in part 3c shall not apply during operation at less than 80 percent load, which is not to exceed 750 hours in any consecutive twelve months. The emissions during operation at less than 80 percent load shall not exceed 14.8 tons per any consecutive twelve months. (9/98 BACT)

3f. The limit in part 3c shall not apply when ambient temperature is less than 35 degrees F. The CO limit when ambient temperature is less than 35 degrees F shall be 15 ppmvd, averaged over one hour. Operation at this alternate limit shall be limited to 100 hours in any consecutive twelve--month period. Emissions of CO while operating under this condition shall be limited to 3120 lbs. in any consecutive twelve-month period. (9/98 BACT)

3g. (Deleted under BAAQMD Application # 13479)

4. Nitrogen oxide (NOx) emissions from each auxiliary boiler (S-101, S-102) shall not exceed 40 ppmvd at 3% oxygen averaged over any three-hour period. (PSD, BACT)

5. (Deleted under BAAQMD Application # 13479)

6. Total emissions from the gas turbine (S-100) and auxiliary boilers (S-101, S-102) shall not exceed 25 ton/year TSP or 40-ton/yr. NMHC.

6.a. As long as natural gas is burned exclusively at the turbine and boilers, particulate emissions shall not be monitored. (Cumulative increase)

6.b. (Deleted under BAAQMD Application # 13479)

6.c. (Deleted under BAAQMD Application # 13479)

7.a. (Deleted under BAAQMD Application # 13479)

7.b. (Deleted under BAAQMD Application # 13479)

8. <u>Deleted after DLN Operational on January 1, 2012</u>. The steam injection to control NOx emissions from the

- turbine shall be operated during all periods when injection

steam is available at the specified pressure and

temperature. This part will no longer apply after the Dry

- Low NOx combustor is installed and operational. (BACT)

9a. <u>Deleted after DLN Operational on January 1, 2012</u>. <u>Pursuant to the PSD permit, the owner or operator</u>

shall install and operate a continuous monitoring system to

- monitor and record the fuel consumption and the ratio of

- steam injected to fuel fired in the turbine. This part

- shall apply until installation of the Dry Low NOx combustor.

(PSD, 2-1-403)

9b. Pursuant to the PSD permit, the owner or operator shall install and operate a continuous monitoring system to monitor and record the fuel fired in the turbine. This part shall apply after the installation of the Dry Low NOx combustor. (PSD, 2-1-403)

10.a. (Deleted under BAAQMD Application # 13479)

10.b. (Deleted under BAAQMD Application # 13479)

11. The owner or operator shall install, calibrate and operate District approved continuous in-stack emission monitors for nitrogen oxides, carbon monoxide, and either oxygen or carbon dioxide at the turbine and the boilers. (PSD, BACT, 2-1-403)

12. (Deleted under BAAQMD Title V application #25841)

13a. The exhaust stack from the gas turbine (P-100) shall be constructed to a height of at least 80 feet. (PSD)

13b. Sampling ports for testing for compliance with these conditions shall be maintained as approved by the District's Source Test Division.

(BAAQMD 1-501)

14. All records associated with the above conditions shall be retained by the owner or operator, for at least five years, for review by the District and shall be supplied to the District upon request. The recording format shall be subject to the approval of the APCO. (PSD, BACT)

15. (Deleted under BAAQMD Application # 13479)

16. (Deleted under BAAQMD Title V application #25841)

17. (Deleted under BAAQMD Application # 13479)

18. The auxiliary boilers (S-101, S-102) shall not operate simultaneously with the gas turbine more than a combined total of 28 boiler hours/day or 3950 boiler hours/year. The auxiliary boilers may operate any time during period of gas turbine outage. (9/13/90) (Cumulative increase)

COND# 14299 -----

1. The owner/operator shall ensure that sources S-100, Gas Turbine, and S-101 & S-102, Boilers exclusively combust no other fuel in them except for natural gas. (basis: 2-1-403)

Condition #18102: For Sources S-3, S-4, S-5, Turbines

Definitions:

Clock Hour:	Any continuous 60-minute period beginning on the hour.
Calendar Day:	Any continuous 24-hour period beginning at 12:00 AM or 0000 hours.
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.
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 time beginning with the introduction of continuous fuel flow
	to the Gas Turbine until the requirements listed in Condition 19 are
	met, but not to exceed 60 minutes.
Gas Turbine Shutdown Mode:	The time from non-compliance with any requirement listed in
	Condition 19 until termination of fuel flow to the Gas Turbine, but
	not to exceed 30 minutes.
Corrected Concentration:	The concentration of any pollutant (generally NOx, CO or NH ₃)
	corrected to a standard stack gas oxygen concentration. For an
	emission point (exhaust of a Gas Turbine) the standard stack gas
	oxygen concentration is 15% O_2 by volume on a dry basis
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:	California Energy Commission

EQUIPMENT DESCRIPTION:

Installation of Three Simple-Cycle Gas Turbine Generators Consisting Of:

- 1. Simple Cycle Gas Turbine, General Electric, LM6000PC, Maximum Heat Input 500 MMBtu/hr, Nominal Electrical Output 45 MW, Natural Gas-Fired.
- 2. Selective Catalytic Reduction NOx Control System.
- 3. Ammonia Injection System.(including the ammonia storage tank and control system)
- 4. Oxidation Catalyst System.

5. Continuous emission monitoring system (CEMS) designed to continuously record the measured gaseous concentrations, and calculate and continuously monitor and record the NOx and CO concentrations in ppmvd corrected to 15% oxygen on a dry basis.

PERMIT CONDITIONS:

Condition #18102

Conditions for the Commissioning Period (Parts 1 through 8 deleted)

9. (Deleted under BAAQMD Application # 13479)

(Parts 10 through 11 deleted)

- 12. Consistency with Analyses: Operation of this equipment shall be conducted in accordance with all information submitted with the application (and supplements thereof) and the analyses under which this permit is issued unless otherwise noted below. (2-1-403)
- <u>13. Conflicts Between Conditions</u>: In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible. (1-102)
- 14. Reimbursement of Costs: All reasonable expenses, as set forth in the District's rules or regulations, incurred by the District for all activities that follow the issuance of this permit, including but not limited to permit condition implementation, compliance verification and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the owner/operator as required by the District's rules or regulations. (2-1-303)
- 15. Access to Records and Facilities: As to any condition that requires for its effective enforcement the inspection of records or facilities by representatives of the District, the Air Resources Board (ARB), the U.S. Environmental Protection Agency (U.S. EPA), or the California Energy Commission (CEC), the owner/operator shall make such records available or provide access to such facilities upon notice from representatives of the District, ARB, U.S. EPA, or CEC. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A. (1-440, 1-441)
- 16. (Deleted under BAAQMD Application # 13479)
- <u>17. Operations</u>: The gas turbine, emissions controls, CEMS and associated equipment shall be properly maintained and kept in good operating condition at all times when the equipment is in operation. (2-1-307)

<u>18. Visible Emissions</u>: No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann 1 or equivalent 20% opacity. (6-301)

19. Emissions Limits:

A 1-hour rolling average is any continuous 60-minute period beginning on the hour.

- 19.1 Oxides of nitrogen (NOx) emissions from the gas turbine shall not exceed 5 ppmvd
 @ 15% O2 (1-hour rolling average), except during periods of startup and shutdown as defined in this permit. The NOx emission concentration shall be verified by a District-approved continuous emission monitoring system (CEMS) and during any required source test. (basis: BACT)
- 19.2 Ammonia emissions from the gas turbine shall not exceed 10 ppmvd @ 15% O2 (3-hour rolling average), except during periods of startup and shutdown as defined in this permit. The ammonia emission concentration shall be verified by a District approved corrected ammonia slip calculation. The correction factor shall be determined during any required source test. (basis: TRMP)
- 19.3 Carbon monoxide (CO) emissions from the gas turbine shall not exceed 6 ppmvd @
 15 % O2 (3-hour rolling average), except during periods of startup and shutdown as defined in this permit. The CO emission concentration shall be verified by a
 District-approved CEMS and during any required source test. (basis: BACT)
- 19.4 Precursor organic compound (POC) emissions from the gas turbine shall not exceed 2 ppmvd @ 15% O2 (3-hour rolling average), except during periods of startup and shutdown as defined in this permit. The POC emission concentration shall be verified during any required source test. (basis: BACT)
- 19.5 Particulate matter emissions less than ten microns in diameter (PM_{10}) from the gas turbine shall not exceed 2.5 pounds per hour, except during periods of startup and shutdown as defined in this permit. The PM_{10} mass emission rate shall be verified during any required source test. (basis: BACT & cumulative increase)
- 19.6 Oxides of sulfur emissions (SOx) from the gas turbine shall not exceed 0.33 pounds per hour. The SOx emission rate shall be verified during any required source test. (basis: BACT & cumulative increase)
- 20. Turbine Startup: Startup of the gas turbine shall not exceed a time period of 60 minutes each per occurrence, or another time period based on good engineering practice and approved in advance by the District. The startup clock begins with the turbine's initial firing and continues until the unit meets the emission concentration limits. (Basis:

Cumulative increase)

- 21. Turbine Shutdown: Shutdown of the gas turbine shall not exceed a time period of 30 minutes each per occurrence, or another time period based on good engineering practice and approved in advance by the District. Shutdown begins with initiation of the turbine shutdown sequence and ends with the cessation of turbine firing. (Basis: Cumulative increase)
- 22. Mass Emission Limits: Total mass emissions from the three gas turbines shall not exceed the daily, and annual mass emission limits listed in Table 1 below.

	/
Daily	Annual
(lb)	(tons)
604.8	39.5
84	6.9
446.1	36.0
23.8	1.9
180	14.7
	(lb) 604.8 84 446.1 23.8

Table 1 – Mass Emission Limits (Including Startups and Shutdowns)

The daily and annual mass limits are on a calendar basis. Compliance shall be based on calendar average one-hour readings through the use of process monitors (e.g., fuel use meters), CEMS, and source test results; and the monitoring, recordkeeping and reporting conditions of this permit. (Basis: Cumulative increase)

- 23. Operational Limits: In order to comply with the emission limits of this rule, the owner/operator shall comply with the following operational limits:
 - (a) The heat input to each gas turbine shall not exceed:

Hourly:	500 MMBtu/hr
Daily:	12,000 MMBtu/day

The heat input to the three gas turbines shall not exceed:

Annual: 5,494,300 MMBtu/year

(b) Only PUC Quality natural gas (General Order 58-a) shall be used to fire the gas turbine. The natural gas shall not contain total sulfur in concentrations exceeding 1.0 gr/100 scf.

- (c) The owner/operator of the gas turbine shall comply with the daily and annual emission limits listed in Table 1 by keeping running totals based on CEM data. (Basis: Cumulative increase)
- 24. Monitoring Requirements: The owner/operator shall comply with the following monitoring requirements for each gas turbine:

(a) The gas turbine exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods.

(b) The ammonia injection system shall be equipped with an operational ammonia flowmeter and injection pressure indicator accurate to plus or minus five percent at full scale and calibrated once every twelve months.

(c) The gas turbine exhaust shall be equipped with continuously recording emissions monitor(s) for NOx, CO and O2. Continuous emissions monitors shall comply with the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring concentrations and mass emissions during normal operating conditions and during startups and shutdowns.

(d) The fuel heat input rate shall be continuously recorded using Districtapproved fuel flow meters along with quarterly fuel compositional analyses for the fuel's higher heating value (wet basis).

(e) The total sulfur and hydrogen sulfide content of the fuel gas shall be analyzed on an annual basis.

(Basis: Cumulative Increase, BACT, 40 CFR 75, 40 CFR 60)

25. Source Testing/RATA: The owner/operator shall perform a relative accuracy test audit (RATA) on the CEMS in accordance with 40 CFR Part 60 Appendix B Performance Specifications on an annual basis. A source test shall be conducted at least once every 8,000 hours of turbine operation or once every three years, whichever comes first. Additional source testing may be required at the discretion of the District to address or ascertain compliance with the requirements of this permit. The written test results of the source tests shall be provided to the District within sixty days after testing. A complete test protocol shall be submitted to the District no later than 30 days prior to testing, and notification to the District at least ten days prior to the actual date of testing shall be provided so that a District observer may be present. The source test protocol shall comply with the following: measurements of NOx, CO, POC, and stack gas oxygen content shall be conducted in accordance with EPAARB Test Method 100; measurements of PM10 shall be conducted in accordance with EPAARB Test Method 5 201A/202; and measurements of ammonia shall be conducted in accordance with Bay Area Air Quality Management

District test method ST-1B. Alternative test methods, and source testing scope, may also be used to address the source testing requirements of the permit if approved in advance by the District. The initial and <u>subsequentannual</u> source tests shall include those parameters specified in the approved test protocol, and shall at a minimum include the following:

- a. NOx (as NOx) ppmvd at 15% O2 and lb/MMBtu_(as NO2);
- b. Ammonia ppmvd at 15% O2 (Exhaust);
- c. CO ppmvd at 15% O2 and lb/MMBtu (Exhaust);
- d. POC ppmvd at 15% O2 and lb/MMBtu (Exhaust);
- e. PM10 lb/hr (Exhaust);
- f. SOx lb/hr (Exhaust);
- g. Natural gas consumption, fuel High Heating Value (HHV), and total fuel sulfur content;
- h. Turbine load in megawatts;
- i. Stack gas flow rate (SDCFM) calculated according to procedures in U.S. EPA Method 19.
- j. Exhaust gas temperature (°F)
- k. Ammonia injection rate (lb/hr or moles/hr)

(Basis: 40 CFR 60, BAAQMD Manual of Procedures Volume IV)

- <u>26.</u> A written quality assurance program, for the CEM, must be established in accordance with 40 CFR Part 75, Appendix B and 40 CFR Part 60 Appendix F. (Basis: 40 CFR Part 75, Appendix B and 40 CFR Part 60, Appendix F)
- 27. The owner/operator shall comply with the applicable requirements of 40 CFR Part 60 Subpart GG. (Basis: NSPS)
- 28. The owner/operator shall notify the District of any breakdown condition consistent with the District's breakdown regulations. (Basis: Regulation 1-208)
- 29. The District shall be notified in writing in a timeframe consistent with the District's breakdown regulations following the correction of any breakdown condition. The breakdown condition shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the actions taken to restore normal operations. (Basis: Regulation 1-208)

<u>30. Recordkeeping</u>: The owner/operator shall maintain the following records:

- (a) hourly, daily, quarterly and annual quantity of fuel used and corresponding heat input rates (cumulative increase);
- (b) the date and time of each occurrence, duration, and type of any startup, shutdown, or malfunction along with the resulting mass emissions during such time period (BACT, cumulative increase);

- (c) emission measurements from all source testing, RATAs and fuel analyses (Cumulative Increase, BACT, 40 CFR 75, 40 CFR 60);
- (d) daily, quarterly and annual hours of operation (Cumulative Increase);
- (e) hourly records of NOx and CO, emission concentrations and hourly ammonia injection rates and ammonia/NOx ratio (BACT);
- (f) for the continuous emissions monitoring system; performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period of non-operation of any continuous emissions monitor (1-522).
- 31. All records required to be maintained by this permit shall be retained by the permittee for a period of five years and shall be made readily available for District inspection upon request. (Basis: BAAQMD 2-6-501)
- 32. <u>Reporting</u>: The owner/operator shall submit to the District a written report for each calendar quarter, within 30 days of the end of the quarter, which shall include:
 - (a) Daily and quarterly fuel use and corresponding heat input rates (Cumulative Increase);
 - (b) Daily and quarterly mass emission rates for all criteria pollutants during normal operations and during other periods (startup/shutdown, breakdowns) (BACT, cumulative increase);
 - (c) Time intervals, date, and magnitude of excess emissions (BACT, cumulative increase);
 - (d) Nature and cause of the excess emission, and corrective actions taken (BACT, cumulative increase);
 - (e) Time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments (1-522);
 - (f) A negative declaration when no excess emissions occurred (BACT, cumulative increase); and

(g) Results of quarterly fuel analyses for HHV and total sulfur/hydrogen sulfide content (Cumulative increase, 40 CFR 75).

- 33. (Deleted under BAAQMD Application # 13479)
- 34. <u>District Operating Permit</u>: The owner/operator shall apply for and obtain all required operating permits from the District according to the requirements of the District's rules and regulations. (Basis: Regulations 2-2 & 2-6)
- 35. (Deleted under BAAQMD Title V application # 6748)

COND# 21961 -----

- For S-100 Gas Turbine, S-101 And S-102, Boilers
- Following are the PSD conditions imposed by EPA before construction in 1985 and amended by Applications 25841 in 1998 and 18434 in 2010.
- I. (deleted BAAQMD Title V application #25841)
- II. (deleted BAAQMD Title V application #25841)
- III. Facilities Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Approval to Construct/Modify shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. (PSD)

- IV. (deleted BAAQMD Title V application #25841)
- V. Right to Entry

The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local air pollution control agency, and/or their authorized representatives, upon the presentation of credentials, shall be permitted:

A. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Approval to Construct/Modify; and

- B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Approval to Construct/Modify; and
- C. to inspect any equipment, operation, or method required in this Approval to Construct/Modify; and

D. to sample emissions from the source. (PSD)

VI. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed or modified, this Approval to Construct/Modify shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Approval to Construct/Modify and its conditions by letter, a copy of which shall be forwarded to the State and local Air Pollution Control Agency. (PSD)

VII. Severability

The provisions of this Approval to Construct/Modify are severable, and, if any provision of this Approval to Construct/Modify is held invalid, the remainder of this Approval to Construct/Modify shall not be affected thereby. (PSD)

VIII. Other Applicable Regulations

The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. (PSD)

IX. Special Conditions

- A. (deleted BAAQMD Title V application #25841)
- B. Air Pollution Control Equipment
- (i) Deleted after DLN Operational on January 1, 2012. On and after the date of startup of
- the
- S100, Turbine, the owner or operator
- shall install, continuously operate, and
- maintain a steam injection system to
- reduce emission of nitrogen oxides from
- the gas turbine. This condition shall
- apply until the installation of Dry Low
 - NOx combustors pursuant to Application 18434, issued in December 2010.
 - (ii) On and after the date of installation of Dry Low NOx combustors at S100, Turbine, pursuant to Application 18434, the owner or operator shall use the Dry Low NOx combustors to reduce emission of nitrogen oxides from the gas turbine.
 - C. Emission Limits for NOX

On and after the date of startup of the gas turbine, the owner or operator shall not discharge or cause the discharge into the atmosphere NOX in excess of 25 ppmv at 15% O2 (3-hour average). (PSD)

This limit shall not apply during cold startup, which is not to exceed four hours, or shutdown procedure, which is not to exceed two hours. However, for daily start-ups after a shutdown of twelve (12) hours or less, the start-up period shall be limited to one (1) hour.

On and after the date of startup of the auxiliary boilers, the owner or operator shall not discharge or cause the discharge into the

atmosphere NOX in excess of 40 ppmv at 3% O2 (3-hour average). (PSD)

- D. Performance Tests
- 1. The owner or operator shall conduct performance tests for NOX and furnish the Bay Area Air Quality Management District and the EPA a written report of the results of such tests upon written request of EPA or the District. Any test for NOX shall be conducted at the maximum capacity of the emission unit being tested. (PSD)
- 2. Performance tests for the emissions of NOx, shall be conducted and the results reported in accordance with the test method set forth in 40 CFR 60, Part 60.8 and Appendix A. Performance tests for the emission of NOX shall be conducted using EPA Methods 7 and 20. (PSD)

The EPA (Attn: A-3-3) shall be notified in writing at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test. (PSD)

Such prior approval shall minimize the possibility of EPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the EPA. (PSD)

- E. Continuous Emission Monitoring
- Prior to the date of startup and thereafter, the owner or operator shall install, maintain and operate the following continuous monitoring systems

in the heat recovery steam generator exhaust stack:

 a. <u>Deleted after DLN Operational on January 1, 2012</u>Continuous monitoring systems to measure stack gas NOX concentration, fuel usage, steam to fuel ratio, and either O2 or CO2 concentrations. The systems shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specifications). Part 1.a shall apply until the installation of Dry Low NOx combustors pursuant to Application 18434, issued in December 2010. (PSD)

b. Continuous monitoring systems to measure stack gas NOX concentration, fuel usage, and either O2 or CO2 concentrations. The systems shall meet EPA monitoring performance specifications. Part 1.b shall apply after the installation of Dry Low NOx combustors pursuant to Application 18434, issued in December 2010. (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specifications). (PSD)

- 2. The owner or operator shall maintain a file of all measurements, including continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurement, maintenance, reports and records. (PSD)
- 3. The owner or operator shall submit a written report of all excess emissions to EPA (Attn: A-3-3) for every calendar

quarter. The report shall include the following:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions. (PSD)
- b. Specific identification of each period of excess emissions that occurs during start-ups, shutdowns and malfunctions of the cogeneration gas turbine system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted shall also be reported. (PSD)
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments. (PSD)
- d. When no excess emission have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report. (PSD)
- e. Excess emissions shall be defined as any three-hour period during which the average emissions of NOX, as measured by the continuous monitoring system, exceeds the NOX maximum emission limits set forth in Conditions IX. C. (PSD)

4. Excess emission indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. (PSD)

F. (Deleted under BAAQMD Title V application # 6748)

G. New Source Performance Standards

The proposed facility is subject to the Federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. (PSD)

VII. APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS

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

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI, the preceding sections take precedence over Section VII.

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
<u>NO_x</u>	BAAQMD 9-9-301.1.3	<u>N</u>		<u>9 ppmv @ 15% O₂, dry</u>	<u>BAAQMD</u> <u>9-9-501</u>	<u>C</u>	<u>CEMS</u>
	BAAQMD 9-9-301.2	<u>N</u>		0.43 lb/MW-hr or 9 ppmv	<u>BAAQMD</u> 9-9-501	<u>C</u>	<u>CEMS</u>
NO _x	SIPBAAQ MD 9-9-301.3	Y		9 ppmv @ 15% O ₂ , dry	BAAQMD 9-9-501 and BAAQMD condition #18102, part 24	С	CEMS

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

Type of	Citation of	FE	Future Effective	T ::4	Monitoring Requirement	Monitoring Frequency	Monitoring
Limit		Y/N	Date	Limit	Citation	(P/C/N)	Туре
	<u>SIPBAAQ</u>	Y		9 ppmv @ 15% O ₂ , dry	BAAQMD	P /A	Source test
	MD 0.0.201.2				condition		every 8,000
	9-9-301.3				#18102,		hrs or every
					part 25		3 yrs, which
							ever comes
NO	NEDE 40	Y		00 mmm @ 150/ O	NCDC 40	С	first
NO _x	NSPS, 40	r		99 ppmv @ 15% O ₂ , dry	NSPS, 40	C	CEMS
	CFR 60.332			4-hour rolling average	CFR 60.334		
	(a)(1)			(Arithmetic average of the	(b)		
				average NO _x concentration			
				measured by the CEMS for			
				a given hour and the three			
				unit operating hour average			
				NO _x concentrations			
				immediately preceding that			
				unit operating hour)			
	None	Y		None	40 CFR 75.10	С	CEMS
	BAAQMD	Y		5 ppmv @ 15% O ₂ , dry,	BAAQMD	С	CEMS
	condition			1-hr average except during	condition		
	#18102,			turbine startup or shutdown	#18102, part		
	part 19.1				19.1, 24		
	BAAQMD	Y		5 ppmv @ 15% O ₂ , dry,	BAAQMD	P/A	Source test
	condition			1-hr average except during	condition		every 8,000
	#18102,			turbine startup or shutdown	#18102,		hrs or every
	part 19.1				part 25		3 yrs, which
							ever comes
							first
	BAAQMD	Y		604.8 lb/calendar day (as	BAAQMD	С	CEMS
	condition			NO ₂) for S-3, S-4, and S-5	condition		
	#18102,			combined	#18102,		
	part 22				part 24		
NO _x	BAAQMD	Y		39.5 tons per calendar year	BAAQMD	С	CEMS
	condition			(as NO ₂) for S-3, S-4, and	condition		
	#18102,			S-5 combined	#18102,		
	part 22				part 24		

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

Renewalvision Date: December 28,

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
СО	BAAQMD	Y		6 ppmv @ 15% O ₂ , dry,	BAAQMD	С	CEMS
	condition			3-hr average except during	condition		
	#18102,			turbine startup or shutdown	#18102,		
	part 19.3				parts 19.3 and		
					24		
	BAAQMD	Y		6 ppmv @ 15% O ₂ , dry,	BAAQMD	P /A	Source test
	condition			3-hr average except during	condition		every 8,000
	#18102,			turbine startup or shutdown	#18102,		hrs or every
	part 19.3				part 25		3 yrs, which
							ever comes
							first
	BAAQMD	Y		446.1 lb/calendar day for	BAAQMD	С	CEMS
	condition			S-3, S-4, and S-5 combined	condition		
	#18102,				#18102,		
	part 22				part 24		
СО	BAAQMD	Y		36.0 tons per calendar year	BAAQMD	С	CEMS
	condition			for S-3, S-4, and S-5	condition		
	#18102,			combined	#18102,		
	part 22				part 24		
CO_2		Y		None	40 CFR 75.10	С	CEMS
							(CO ₂)
							or CEMS
							(O_2) or fuel
							flow
							monitor
SO ₂	BAAQMD	Y		GLC ¹ of 0.5 ppm for 3 min		Ν	
	9-1-301			or 0.25 ppm for 60 min or			
				0.05 ppm for 24 hours			
	BAAQMD	Y		300 ppm (dry)	BAAQMD	P/QA	Total sulfur
	9-1-302				condition		and
					#18102,		hydrogen
					part 24		sulfide
							analysis

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
SO ₂	NSPS	Y		SO ₂ in gases exiting turbine	NSPS, 40	<u>N</u> P/D	Determine
	40 CFR			\leq 0.015% (vol.)	CFR 60.334		total sulfur
	60.333(a)			@15% O ₂ (dry)	(h)(1)		content of
	or			or			the fuel fired
	60.333(b)			Total sulfur in fuel			in turbines
				combusted in turbines			using total
				\leq 0.8% by wt. (8000 ppmw)			sulfur
							methods
							described in
							4 0 CFR
							60.335(b)(1
							0)
SO_2	None	Y		None	40 CFR		Fuel
					75.11, 40		measure-
					CFR 75,		ments,
					Appendix D,		calculations
					part 2.3		
SO_2	BAAQMD	Y		0.33 lb/clock hr for S-3,	BAAQMD	P/ Q A	Total sulfur
	condition			S-4, and S-5 combined	condition		and
	#18102,				#18102,		hydrogen
	part 19.6				part 24		sulfide
							analysis
	BAAQMD	Y		0.33 lb/clock hr for S-3,	BAAQMD	P /A	Source test
	condition			S-4, and S-5 combined	condition		every 8,000
	#18102,				#18102,		hrs or every
	part 19.6				part 25		3 yrs, which
							ever comes
							first
SO_2	BAAQMD	Y		23.8 lb/calendar day for S-	BAAQMD	P/QA	Total sulfur
	condition			3, S-4, and S-5 combined	condition		and
	#18102,				#18102,		hydrogen
	part 22				part 24		sulfide
							analysis

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

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 #18102, part 22	Y		1.9 tons/calendar year for S-3, S-4, and S-5 combined	BAAQMD condition #18102, part 24	Р/ <u>ӘА</u>	Total sulfur and hydrogen sulfide
	BAAQMD condition #18102, part 23.b	Y		Total sulfur content in natural gas combusted in turbines ≤ 1.0 gr/100 0.25 gr/100 scf	BAAQMD condition #18102, part 24.e	P/Q	analysis Analysis of total sulfur content in fuel
Opacity	BAAQMD 6- <u>1-</u> 301	¥ <u>N</u>		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
<u>Opacity</u>	<u>SIP 6-301</u>	Y		<u>> Ringelmann No. 1 for no</u> more than 3 minutes in any hour		<u>N</u>	
Opacity	BAAQMD condition #18102, part 18	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour or equivalent 20% opacity		N	
<u>FP</u>	<u>BAAQMD</u> <u>6-1-310</u>	<u>N</u>		0.15 grain/dscf		<u>N</u>	
FP	<u>SIPBAAQ</u> MD 6-310	Y		0.15 grain/dscf		Ν	
PM ₁₀	BAAQMD condition #18102, part 19.5	Y		2.5 lb/clock hr for <u>each</u> <u>turbine</u> S 3, S 4, and S 5 <u>combined</u> , except during turbine startup or shutdown	BAAQMD condition #18102, part 25	P /A	Source test every 8,000 hrs or every 3 yrs, which ever comes first

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
PM ₁₀	BAAQMD	Y		180 lb/calendar day for S-3,	BAAQMD	P /A	Source Test
	condition			S-4 & S-5 combined	condition		every 8,000
	#18102,				#18102,		hrs or every
	part 22				part 25		3 yrs, which
							ever comes
							first <u>, and</u>
							fuel
							monitoring
<u>PM₁₀</u>	BAAQMD	Y		14.7 tons/year for S-3, S-4	BAAQMD	P /A	Source Test
	condition			& S-5 combined	condition		every 8,000
	#18102,				#18102,		hrs or every
	part 22				part 25		3 yrs, which
							ever comes
							first <u>, and</u>
							fuel
							monitoring
POC	BAAQMD	Y		2 ppmv @ 15% O2, dry,	BAAQMD	P /A	Source test
	condition			3-hr average except during	condition		every 8,000
	#18102,			turbine startup or shutdown	#18102,		hrs or every
	part 19.4				part 19.4		3 yrs, which
							ever comes
							first
POC	BAAQMD	Y		2 ppmv @ 15% O ₂ , dry,	BAAQMD	Р	Source test
	condition			3-hr average except during	condition		every 8,000
	#18102,			turbine startup or shutdown	#18102,		hrs or every
	part 19.4				part 25		3 yrs, which
							ever comes
							first

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
	BAAQMD	Y		84 lb/calendar day for S-3,	BAAQMD	Р	Source test
	condition			S-4, and S-5 combined	condition		every 8,000
	#18102,				#18102,		hrs or every
	part 22				part 25		3 yrs, which
							ever comes
							first <u>, and</u>
							fuel
							monitoring
POC	BAAQMD	Y		6.9 ton/calendar year for	BAAQMD	Р	Source test
	condition			-S-3, S-4, and S-5	condition		every 8,000
	#18102,			combined	#18102,		hrs or every
	part 22				part 25		3 yrs, which
							ever comes
							first <u>, and</u>
							fuel
							monitoring

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
NH3	BAAQMD	Ν		10 ppmv @ 15% O ₂ , dry,	BAAQMD	<u>C</u> P	<u>Ammonia</u>
	condition			averaged over 3 hrs except	condition		injection
	#18102,			during turbine startup or	#18102,		rate monitor,
	Part 19.2			shutdown	parts 19.2 and		calculations,
					24 <u>, 25</u>		and periodic
							source
							testing every
							<u>8,000 hrs or</u>
							every 3 yrs,
							which ever
							comes first
							District
							approved
							correct
							ammonia
							<u>slip</u>
							calculation
							and
							correction
							factor
							determined
							by source
							test
	BAAQMD	Ν		10 ppmv @ 15% O2, dry,	BAAQMD	P/A	Source test
	condition			averaged over 3 hrs except	condition		every 8,000
	#18102,			during turbine startup or	#18102,		hrs or every
	Part 19.2			shutdown	part 25		3 yrs, which
							ever comes
							first
Heat	BAAQMD	Y		500 MM BTU/clock hr	BAAQMD	С	Fuel meter,
input	condition			(HHV) for each turbine,	condition		firing
limit	#18102,			S-3, S-4, and S-5	#18102,		monitor
	part 23				part 24d		

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
	BAAQMD	Y		500 MM BTU/clock hr	BAAQMD	P/Q	Fuel
	condition			(HHV), for each turbine,	condition		composition
	#18102,			S-3, S-4, and S-5	#18102,		analysis
	part 23				part 24d		
Heat	BAAQMD	Y		500 MM BTU/clock hr	BAAQMD	P/A	Source test
input	condition			(HHV), for each turbine,	condition		every 8,000
limit	#18102,			S-3, S-4, and S-5	#18102,		hrs or every
	part 23				part 25		3 yrs, which
							ever comes
							first
Heat	BAAQMD	Y		12,000 MM BTU/day	BAAQMD	С	fuel meter,
<u>input</u>	condition			(HHV) for each turbine,	condition		firing
<u>limit</u>	#18102,			S-3, S-4, and S-5	#18102,		monitor,
	part 23				part 30.a		calculations
	BAAQMD	Y		12,000 MM BTU/day	BAAQMD	P/Q	Fuel
	condition			(HHV) for each turbine,	condition		composition
	#18102,			S-3, S-4, and S-5	#18102,		analysis
	part 23				part 24d		
Heat	BAAQMD	Y		5,494,300 MM BTU/yr ₂ -	BAAQMD	С	fuel meter,
input	condition			<u>f</u> ₽ or S-3, S-4, and S-5,	condition		firing
limit	#18102,			Turbines combined	#18102,		monitor,
	part 23				part 30.a		calculations
Heat	BAAQMD	Y		5,494,300 MM BTU/yr ₂ -	BAAQMD	P/Q	Fuel
input	condition			<u>f</u> F or S-3, S-4, and S-5,	condition		composition
limit	#18102,			Turbines combined	#18102,		analysis
	part 23				part 24d		
MW				None	BAAQMD	P /A	Source test
					condition		every 8,000
					#18102,		hrs or every
					part 25		3 yrs, which
							ever comes
							first

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES
Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Gas				None	BAAQMD	P /A	Source test
tempe-					condition		every 8,000
rature					#18102,		hrs or every
					part 25		3 yrs, which
							ever comes
							first
Stack gas				None	BAAQMD	P /A	Source test
flow					condition		every 8,000
					#18102,		hrs or every
					part 25		3 yrs, which
							ever comes
							first
NH3				None	BAAQMD	P/A	Source test
injection					condition		every 8,000
rate					#18102,		hrs or every
					part 25		3 yrs, which
							ever comes
							first

Table VII – A Applicable Limits and Compliance Monitoring Requirements S-3, S-4, S-5, TURBINES

	Citation of		Future		Monitoring	Monitoring	
Type of	Limit	FE	Effective		Requirement	Frequency	Monitoring
limit		Y/N	Date	Limit	Citation	(P/C/N)	Туре
<u>NO_x</u>	BAAQMD	<u>N</u>		<u>< 15 ppmv* @ 15% O₂,</u>	<u>9-9-501</u>	<u>C</u>	<u>CEMS</u>
	<u>9-9-301.1.2</u>			dry, 3-hr average			
	and 9-9-401			*corrected for efficiency			
<u>NOx</u>	BAAQMD	Ν	After Dry	< 5 ppmv @ 15% O2, dry,	<u>9-9-501</u>	<u>C</u>	<u>CEMS</u>
	9-9-301.2		Low NOx	<u>3-hr average or ≤ 0.15</u>			
			combustors	<u>lbs/MWhr</u>			
			are fully				
			operational				
			<u>, or by</u>				
			January 1,				
			2012 at the				
			latest After				
			DLN				
			Installed				
			(by				
			1/1/2012)				
NO _x	SIP 9-9-305	Y		\leq 21.0 ppmv* @ 15% O _{2,}	BAAQMD	С	CEMS
	and			dry, 3-hr average	9-9-501		
	9-9-401			*corrected for efficiency			
	BAAQMD	N		<u>< 15 ppmv* @ 15% O₂</u> ,	9-9-501	e	CEMS-
	9-9-301.1.3			dry, 3 hr average			
	BAAQMD	Y			BAAQMD	С	CEMS
	Permit			\leq 25 ppmv @ 15% O ₂ , 3-	Permit		
	Cond# 2780			hr avg .	Condition		
	part 1a <u>(i)</u>				2780, part 11		
	BAAQMD	<u>Y</u>	After Dry		BAAQMD	<u>C</u>	<u>CEMS</u>
	Permit		Low NOx	< 5 ppmv @ 15% O2 or	Permit		
	Cond#		combustors	0.15 lb/MW-hr, 3-hr avg.	Condition		
	<u>2780, part</u>		are fully		<u>2780, part 11</u>		
	<u>1a(ii)</u>		operational				
			<u>, or by</u>				
			January 1,				
			2012 at the				
			latest				

Table VII-BS-100 – GAS TURBINE

	Citation of		Future		Monitoring	Monitoring	
Type of	Limit	FE	Effective		Requirement	Frequency	Monitoring
limit		Y/N	Date	Limit	Citation	(P/C/N)	Туре
	BAAQMD	Y			BAAQMD	С	CEMS
	Permit			\leq 21.0 ppmv @ 15% O ₂ ,	9-9-501		
	Cond#			dry, calendar day average			
	2780 <u>.</u> part						
	1e						
NO _x	BAAQMD	Y		< 323.7 tons per any	BAAQMD	С	CEMS
	Permit			twelve consecutive	9-9-501		
	Cond#			months			
	2780 <u>.</u> part						
	1f						
	BAAQMD	Y		< 1876 lb per calendar	BAAQMD	С	CEMS
	Permit			day	9-9-501		
	Cond#						
	2780 <u>.</u> part						
	1g						
	BAAQMD	Y		≤ 25 ppmv @ 15% O ₂ ,	BAAQMD	С	CEMS
	permit			dry 3-hr average	9-9-501		
	condition #						
	21961-, part						
	IX-C.						
NO _x	BAAQMD	Y		Natural Gas or Fuel Oil	BAAQMD	С	CEMS
	permit			≤ 25 ppmv @ 15% O ₂ ,	permit		
	condition #			dry 3-hr average	condition #		
	21961, part				21961, part		
	IX-C.				IX-E.		

Table VII-BS-100 – GAS TURBINE

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring
NO _x	NSPS, 40	Y	Date	82 ppmv @ 15% O ₂ , dry	NSPS, 40	C (F/C/N)	Type CEMS
NO _x	CFR 60.332	I		4-hour rolling average	CFR 60.334	C	CEM5
	(a)(1)			(Arithmetic average of the	(b)		
	(a)(1)			average NO _x	(0)		
				concentration measured	Note:		
				by the CEMS for a given	60.334(c)		
				hour and the three unit	also applies		
				operating hour average	after the		
				NO_x concentrations	installation of		
				immediately preceding	Dry Low		
				that unit operating hour)	NOx		
				that thirt operating notify	Combustors		
					on January 1,		
					2012		
	None	Y		None	40 CFR 75.10	С	CEMS
POC	BAAQMD	Y		< 40 TPY NMHC for		Ν	
	Permit			S-100, S-101, S-102			
	Condition						
	2780 <u>,</u> part 6						
SO_2	None	Y		None	40 CFR		Fuel
					75.11, 40		measure-
					CFR 75,		ments,
					Appendix D,		calculations
					part 2.3		
SO_2	BAAQMD	Y		GLC ¹ of 0.5 ppm for 3		Ν	
	9-1-301			min or 0.25 ppm for 60			
				min or 0.05 ppm for 24			
				hours			
SO_2	BAAQMD	Y		300 ppm (dry)		Ν	
	9-1-302						

Table VII-BS-100 – GAS TURBINE

limit	Limit	FE Y/N	Future Effective	Limit	Monitoring Requirement Citation	Monitoring Frequency	Monitoring
	NCDC 40		Date	Liiiit		(P/C/N)	Туре
SO ₂	NSPS 40	Y			NSPS, 40	<u>N</u> P/D	Determine
	CFR			SO_2 in gases exiting	CFR 60.334		total sulfur
	60.333 (a)			turbine $\leq 0.015\%$ (vol.)	(h)(1)		content of the
	or			@15% O ₂ (dry)			fuel fired in
	60.333(b)			or			turbines using
				Total sulfur in fuel			total sulfur
				combusted in turbines			methods
				\leq 0.8% by wt. (8000			described in
				ppmw)			4 0 CFR
							60.335(b)(10)
1	BAAQMD	<u>N</u>		> Ringelmann No. 1 for		<u>N</u>	
<u>Opacity</u>	<u>6-1-301</u>			no more than 3 minutes in			
				<u>any hour</u>			
J	BAAQMD	Y		> Ringelmann No. 1 for		Ν	
Opacity	6-301			no more than 3 minutes in			
				any hour			
FP 1	BAAQMD	¥		0.15 grain/dscf		N	
	6-310						
FP 1	BAAQMD	N		0.15 grain/dscf @6% O ₂		N	
	6-1-310.3	_		<u>_</u> _		_	
	SIP 6-310.3	Y		<u>0.15 grain/dscf @6% O₂</u>		N	
FP 1	BAAQMD	Y		< 25 TPY total FP for		Ν	
	Permit			S-100, S-101, S-102			
	Condition						
2	2780 <u>,</u> part 6						
CO ₂	-1	Y		None	40 CFR 75.10	С	CEMS (CO ₂)
2							or CEMS
							(O_2) or fuel
							flow monitor
Carbon	BAAQMD	Y		emissions < 100 tons/yr	BAAQMD	С	CEMS
Monoxide	Permit	-		(for S-100, S-101, and S-	Permit	÷	022110
	Condition			(101 S 100, S 101, and S 102)	Condition		
	2780 <u>,</u> part			102)	2780, part 11		
	2780 <u>.</u> part 3b				2700 <u>1</u> part 11		

Table VII-BS-100 – GAS TURBINE

	Citation of		Future		Monitoring	Monitoring	
Type of	Limit	FE	Effective		Requirement	Frequency	Monitoring
limit		Y/N	Date	Limit	Citation	(P/C/N)	Туре
Carbon	BAAQMD	Y		10 ppmvd @ 15% O ₂ , 3-	BAAQMD	С	CEMS
Monoxide	Permit			hr average, except during	Permit		
	Condition			startup, shutdown,	Condition		
	2780 <u>.</u> part			operation at < 80% load,	2780 <u>.</u> part 11		
	3c			and operation at low			
				ambient temperature			
Carbon	BAAQMD	Y		< 14670 lbs. CO during	BAAQMD	С	CEMS
Monoxide	Permit			startups and shutdowns	Permit		
	Condition			per any consecutive 12-	Condition		
	2780 <u>.</u> part			month period	2780 <u>,</u> part 11		
	3d						
	BAAQMD	Y		< 750 hours of operation	BAAQMD	С	CEMS
	Permit			at < 80% load per any	Permit		
	Condition			consecutive 12-month	Condition		
	2780 <u>.</u> part			period	2780 <u>.</u> part 11		
	3e						
Carbon	BAAQMD	Y		< 14.8 tons CO during	BAAQMD	С	CEMS
Monoxide	Permit			operation at < 80% load	Permit		
	Condition			per any consecutive 12-	Condition		
	2780 <u>,</u> part			month period	2780 <u>.</u> part 11		
	3e						
Carbon	BAAQMD	Y		< 100 hours of operation	BAAQMD	С	CEMS
Monoxide	Permit			at ambient temperatures <	Permit		
	Condition			35° F. per any consecutive	Condition		
	2780 <u>,</u> part			12-month period	2780 <u>.</u> part 11		
	3f						
Carbon	BAAQMD	Y		15 ppmvd @ 15% O ₂ , 1-	BAAQMD	С	CEMS
Monoxide	Permit			hr average, during	Permit		
	Condition			operation at low ambient	Condition		
	2780 <u>,</u> part			temperature	2780 <u>.</u> part 11		
	3f						

Table VII-BS-100 – GAS TURBINE

¹ Ground Level Concentration

	Citation of		Future		Monitoring	Monitoring	
Type of	Limit	FE	Effective		Requirement	Frequency	Monitoring
limit		Y/N	Date	Limit	Citation	(P/C/N)	Туре
NO _x	BAAQMD	<u>N</u> ¥		30 ppmv @3%O ₂ , dry, 3-hr	BAAQMD	С	CEMS
	9-7-301.1			average	Permit		
					Condition		
					2780 <u>,</u> part 11		
	<u>SIP 9-7-</u>	<u>Y</u>		<u>30 ppmv @3%O₂, dry, 3-hr</u>	BAAQMD	<u>C</u>	<u>CEMS</u>
	<u>301.1</u>			average	Permit		
					Condition		
					2780, part 11,		
					BAAQMD 1-		
					<u>520.1</u>		
	BAAQMD	<u>N</u>	<u>1/1/2014</u>	<u>5 ppmv @3%O₂, dry, 3-hr</u>	BAAQMD	<u>C</u>	<u>CEMS</u>
	<u>9-7-307.6</u>		<u>1st Unit,</u>	average	Permit		
			<u>1/1/2015</u>		Condition		
			2 nd Unit		<u>2780, part 11,</u>		
					BAAQMD 1-		
					<u>520.1</u>		
NO _x	BAAQMD	Y		<u>43</u> 0 ppmv @ 3%O ₂ , dry,,	BAAQMD	С	CEMS
	Permit			3-hr average	Permit		
	Condition				Condition		
	2780 <u>,</u> part				2780 <u>.</u> part 11		
	4						
	BAAQMD	Y		\leq 40 ppmv @ 3% O ₂ , dry,	BAAQMD	С	CEMS
	permit			3-hr average	permit		
	condition				condition #		
	#21961,				21961, part		
	part IX-C				IX-D.		
NO _x	NSPS	Y		0.2 lb/MM Btu, averaged	Monitoring	Ν	
	60.44b(a)			over 24 hrs	requirement		
	(1)(ii)				subsumed by		
					BACT cond.		
					#2780, parts		
					3 and 11. See		
					Permit		
					Shield.		

Table VII-CS-101, S-102 – BOILERS

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD	N	Dutt	400 ppmv @ 3% O ₂ , dry,	Citation	<u>N</u>	Type
<u> </u>	<u>9-7-301.4</u>	<u></u>		<u>3-hr average</u>		<u> </u>	
СО	<u>SIP</u> BAAQ	Y		400 ppmv @_3%_O ₂ , dry,		N	
	MD 9-7-			3-hr average			
	301.2						
	BAAQMD	Y		< 100 tons per year, for S-	BAAQMD	С	CEMS
	Permit			100, S-101, and S-102	Permit		
	Condition				Condition		
	2780 <u>.</u> part				2780 <u>,</u> part 11		
	3b						
SO_2	BAAQMD	Y		GLC ¹ of 0.5 ppm for 3 min		Ν	
	9-1-301			or 0.25 ppm for 60 min or			
				0.05 ppm for 24 hours			
	BAAQMD	Y		300 ppm (dry)		Ν	
	9-1-302						
Opacity	BAAQMD	<u>N</u>		> Ringelmann No. 1 for no		<u>N</u>	
	<u>6-1-301</u>			more than 3 minutes in any			
				hour			
Opacity	<u>SIP</u> BAAQ	Y		> Ringelmann No. 1 for no		Ν	
	₩Ð 6-301			more than 3 minutes in any			
				hour			
<u>FP</u>	BAAQMD	<u>N</u>		0.15 grain/dscf		<u>N</u>	
	<u>6-1-310.3</u>			<u>@ 6% O</u> 2			
FP	<u>SIP</u> BAAQ	Y		0.15 grain/dscf		Ν	
	MD 6-			@ 6% O ₂			
	310.3						
FP	BAAQMD	Y		< 25 TPY FP for		Ν	
	Permit			S-100, S-101, S-102			
	Condition						
	2780 <u>,</u> part						
	6						
POC	BAAQMD	Y		< 40 TPY NMHC for S-		Ν	
	Permit			100, S-101, S-102			
	Condition						
	2780 <u>,</u> part						
L	6			00	I		

Table VII-CS-101, S-102 – BOILERS

Renewalvision Date: December 28,

	Citation of		Future		Monitoring	Monitoring	
Type of	Limit	FE	Effective		Requirement	Frequency	Monitoring
limit		Y/N	Date	Limit	Citation	(P/C/N)	Туре
Hours of	BAAQMD	Y		Simultaneous use with the	none	P/E	Record-
operation	Permit			gas turbine < combined			keeping
	Condition			total of 28 boiler hours/day			
	2780,			or 3950 boiler hours/year			
	part 18						

Table VII-D S-104 – COOLING TOWER

Table VII-C S-101, S-102 – BOILERS

¹ Ground Level Concentration

Citation of Future Monitoring Monitoring Type of Limit FE Effective Requirement Frequency Monitoring Citation (P/C/N)limit Y/N Date Limit Туре BAAQMD Opacity N > Ringelmann No. 1 for no N 6-1-301 more than 3 minutes in any hour <u>SIP</u>BAAQ Y Ν Opacity > Ringelmann No. 1 for no MD 6-301 more than 3 minutes in any hour FP BAAQMD N 0.15 grain/dscf N <u>6-1-310</u> <u>SIP</u>BAAQ FP Υ 0.15 grain/dscf Ν MD 6-310 BAAQMD Y <u>40 lbs/hr</u> N 6-1-311 40 lbs/hr SIPBAAQ Υ Ν MD 6-311

Table VII - E Applicable Limits and Compliance Monitoring Requirements S-6 - EMERGENCY STANDBY FIRE PUMP: DIESEL ENGINE

VII.	Applicable Emission	limits & Compliance	• Monitoring Requirements
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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 Regulation 6-303	¥		Ringelmann 2.0 For less than 3 minutes in an hour	None	N	Visual Observation
FP	BAAQMD Regulation 6-310	¥		0.15 grains per dscf of exhaust gas volume	None	N	None
SO₂	BAAQMD Regulation 9–1–301	¥		Ground Level Concentration of 0.5 ppm for 3 min. or 0.25 ppm for 60 min. or 0.05 ppm for 24 hours	None	N	None
\$0 2	BAAQMD Regulation 9-1-304	¥		Sulfur Content of Fuel <0.5% by weight	None	N	Fuel Certification by Vendor

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.

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
<u>6-1-301</u>		Emissions, or EPA Method 9
<u>SIP</u> 6-301		
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
<u>6-1-310</u>		or EPA Method 5, Determination of Particulate Matter Emissions
<u>SIP</u> 6-310		from Stationary Sources
BAAQMD	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
<u>6-1-311</u>		or EPA Method 5, Determination of Particulate Matter Emissions
<u>SIP</u> 6-311		from Stationary Sources
BAAQMD	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,
9-1-302		Continuous Sampling
BAAQMD	Fuel Sulfur Content	Manual of Procedures, Volume III, Method 10, Determination of
9-1-304		Sulfur in Fuel Oils.
BAAQMD	Performance Standard, NO _x ,	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
9-7-301.1	Gaseous Fuel	Continuous Sampling and ST-14, Oxygen, Continuous Sampling.
		or ARB Method 100 Procedures for Continuous Gaseous
		Emission Stack Sampling
BAAQMD	Performance Standard, CO,	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
9-7-301.2	Gaseous Fuel	Continuous Sampling and ST-14, Oxygen, Continuous Sampling.
		or ARB Method 100 Procedures for Continuous Gaseous
		Emission Stack Sampling
BAAQMD	Emission Limits- Existing Low	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
9-9-305	NO _x Turbines	Continuous Sampling and ST-14, Oxygen, Continuous Sampling.
		or ARB Method 100 Procedures for Continuous Gaseous
		Emission Stack Sampling

Table VIII Test Methods

IV. Test Methods

Table VIIITest Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Deadline for Demonstration of	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
9-9-503.2	Compliance with §9-9-301	Continuous Sampling and ST-14, Oxygen, Continuous Sampling.
		or ARB Method 100 Procedures for Continuous Gaseous
		Emission Stack Sampling
BAAOMD		
BAAQMD		
Condition		
#2780		
part 1	NO _x Limit (basis: BACT, PSD)	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
		Continuous Sampling and ST-14, Oxygen, Continuous Sampling.
		or ARB Method 100 Procedures for Continuous Gaseous
		Emission Stack Sampling
part 3	CO control requirement and	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
	Limit (basis: BACT)	Continuous Sampling and ST-14, Oxygen, Continuous Sampling.
		or ARB Method 100 Procedures for Continuous Gaseous
		Emission Stack Sampling
part 4	NO _x Limit (basis: PSD, BACT)	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
•		Continuous Sampling and ST-14, Oxygen, Continuous Sampling.
		or ARB Method 100 Procedures for Continuous Gaseous
		Emission Stack Sampling
BAAQMD		
Condition		
#18102		
Part 19.1	NO Limit	ARB Method 100 Procedures for Continuous Gaseous Emission
Part 19.1	NO _x Limit	Stack SamplingTest Procedure ARB 100
Part 19.2	NH ₃ Limit	BAAQMD Test Procedure ST-1B, Ammonia, Integrated
		Sampling
Part 19.3	CO Limit	ARB Method 100 Procedures for Continuous Gaseous Emission Stack SamplingTest Procedure ARB 100
Part 19.4	POC Limit	ARB Method 100 Procedures for Continuous Gaseous Emission
1 at 17. 4		Stack SamplingTest Procedure ARB 100
Part 19.5	PM ₁₀ Limit	EPA Method 201A, Determination of PM10 Emissions, plus EPA
		Method 202, Determination of Condensable Particulate Emissions from Stationary Sources Test Procedure ARB 5
Part 19.6	SO _x Limit	Test Procedure, MOP Vol.4, ST-19A or ST-19B
PSD Permit		

IV. Test Methods

Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	PSD permit, part IX-C.	EPA Method 7,-Determination of Nitrogen Oxide Emissions from
condition #		Stationary Sources EPA Method 20-Determination of Nitrogen Oxides, Sulfur
21961,		Dioxide, and Diluent Emissions from Stationary Gas Turbines
part IX-C.		
NSPS	Standards of Performance for	
Subpart GG	Stationary Gas Turbines	
	(1/27/82)	
60.332 (a)(1)	Performance Standard, NO _x	EPA Method 20, Determination of Nitrogen Oxides, Sulfur
		Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (a)	SO ₂ 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
NSPS 40 CFR	40 CFR 60, Appendix A	EPA Method 7,-Determination of Nitrogen Oxide Emissions from
60.8		Stationary Sources
		EPA Method 20-Determination of Nitrogen Oxides, Sulfur
		Dioxide, and Diluent Emissions from Stationary Gas Turbines

IX. TITLE IV ACID RAIN PERMIT

Effective March 16, 201207 through March 15, 20171

ISSUED TO:

Calpine Gilroy Cogen, L.P. and Gilroy Energy Center, LLC 1400 Pacheco Pass Highway Gilroy, CA 95020

PLANT SITE LOCATION: 1400 Pacheco Pass Highway Gilroy, CA 95020

ISSUED BY:

Signed by Jack P. Broadbent	December 28, 2007
Jack P. Broadbent, Executive Officer/	Date
Air Pollution Control Officer	

Type of Facility:Cogeneration Plant and Power PlantPrimary SIC:4911Product:Cogeneration of electricity and steam

DESIGNATED REPRESENTATIVE

Name:	Eugene Fahey
Title:	General Manager
Phone:	(831) 385- <u>7942</u> 4090; ext: 54212

FACILITY CONTACT PERSON:

Name:Maria Barroso/ Michael FeesTitle:Compliance/Operations ManagerPhone:(408) 385-7943/(408) 337-3425847-5328; ext: 71417

ACID RAIN PERMIT CONTENTS

- 1) Statement of Basis
- 2) SO_2 allowance allocated under this permit and NO_x 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) SO₂ ALLOWANCE ALLOCATIONS

	Year	20 <u>12</u> 05	20 <u>13</u> 06	20 <u>14</u> 07	20 <u>14</u> 08	20 <u>16</u> 09
	SO ₂ allowances under Table 2 of 40 CFR Part 73	None	None	None	None	None
S-3, Turbine	NO _x Limit		0	ct to the NO		

	Year	20 <u>12</u> 05	20 <u>13</u> 06	20 <u>14</u> 07	20 <u>15</u> 08	20 <u>16</u> 09
	SO ₂ allowances under Table 2 of 40	None	None	None	None	None
	CFR Part 73					
S-4, Turbine	NO _x Limit	This unit	is not subje	ct to the NO	_x requiremen	ts from 40
		CFR Par	t 76 as this u	unit is not caj	pable of firin	g on coal.

	Year	20 <u>12</u> 05	20 <u>13</u> 06	20 <u>14</u> 07	20 <u>15</u> 08	20 <u>16</u> 09
	SO ₂ allowances	None	None	None	None	None
	under Table 2 of 40					
	CFR Part 73					
S-5, Turbine	NO _x Limit	This unit	is not subje	ct to the NO,	, requiremen	ts from 40
		CFR Par	t 76 as this u	init is not caj	pable of firin	g on coal.

	Year	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
	<u>SO₂ allowances</u>	None	None	None	None	<u>None</u>
	under Table 2 of 40					
	<u>CFR Part 73</u>					
<u>S-100,</u>	<u>NO_x Limit</u>	<u>This unit</u>	is not subje	<u>ct to the NO</u> ,	<u>, requiremen</u>	<u>ts from 40</u>
<u>Turbine</u>		CFR Par	<u>t 76 as this u</u>	<u>init is not ca</u>	pable of firin	<u>g on coal.</u>

3) COMMENTS, NOTES AND JUSTIFICATIONS

None

4) PERMIT APPLICATION

Attached



Identify the facility name, State, and plant (ORIS) United States Environmental Protection Agency , Acid Rain Program

OMB No. 2060-0258 Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: 🗌 new 📋 revised 🔀 for Acid Rain permit renewal

STEP 1

Calpine Gilroy Co		10034
Facility (Source) Name	State	Plant Code

STEP 2

code.

Enter the unit ID# for every affected unit at the affected source in column "a."

а	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
S100	Yes
	Yes

EPA Form 7610-16 (Revised 12-2009)

Calpine Gilroy Cogen, LP Facility (Source) Name (from STEP 1) Acid Rain - Page 2

Permit Requirements

STEP 3

Read the standard

requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

 (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
 (3) An affected unit shall be subject to the requirements under paragraph (1)

of the sulfur dioxide requirements as follows: (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR

EPA Form 76:10-16 (Revised 12-2000)

72.6(a)(3).

Calpine Gilroy Cogen, LP Facility (Source) Name (from STEP 1) Acid Rain - Page 3

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.

(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:

(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting

authority:

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

EPA Form 7610-16 (Revised 12-2009)

Calpine Gilroy Cogen, LP Facility (Source) Name (from STEP 1) Acid Rain - Page 4

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

 (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
 (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

EPA Form 7610-16 (Revised 12-2009)

Calpine Gilroy Cogen, LP Facility (Source) Name (from STEP 1)

Acid Rain - Page 5

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

STEP 3, Cont'd.

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

STEP 4 Read the certification statement, sign, and date. I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Eugene Fahey	
Name	
Signature	Date 9/13/2010



United States Environmental Protection Agency Acid Rain Program

OMB No. 2060-0258 Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: new revised 🔀 for Acid Rain permit renewal

STEP 1

Identify the facility name, 55810 Gilroy Energy Center, LLC CA Plant Code State, and plant (ORIS) Facility (Source) Name State

STEP 2

code.

Enter the unit ID# for every affected unit at the affected source in column "a."

а	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1
S3	Yes
S4	Yes
S5	Yes
	Yes

EPA Form 7610-16 (Revised 12-2009)

Gilroy Energy Center, LLC Facility (Source) Name (from STEP 1) Acid Rain - Page 2

Permit Requirements

STEP 3

requirements.

Read the standard

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Gilroy Energy Center, LLC Facility (Source) Name (from STEP 1)

Acid Rain - Page 3

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd. (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.

(2) The owners and operators of an affected source that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay upon demand the

interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

EPA Form 7610-16 (Revised 12-2009)

Gilroy Energy Center, LLC Facility (Source) Name (from STEP 1) Acid Rain - Page 4

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program, and,

(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability 1 4 1

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

EPA Form 7610-16 (Revised 12-2009)

Gilroy Energy Center, LLC

Acid Rain - Page 5

Facility (Source) Name (from STEP 1)

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

STEP 3, Cont'd.

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or

limiting such State regulation, including any prudence review requirements under such State law; (4) Modifying the Federal Power Act or affecting the authority of the Federal

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

STEP 4 Read the certification statement, sign, and date. I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Eugene Fahey /	
Name	
Signature	Date 9/13/2010

X. PERMIT SHIELD

A. NON-APPLICABLE REQUIREMENTS

The facility has not identified any applicable requirements to be included in a permit shield.

Pursuant to District Regulations 2-6-233 and 2-6-409.12, the federally enforceable regulations and/or standards cited in the following table[s] are not applicable to the source or group of sources identified at the top of the table[s]. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the regulatory and/or statutory provisions cited.

Table X-A S-101, S-102 - BOILERS

Citation	Title or Description
	(Reason not applicable)
NSPS Subpart	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction
Ð	Is Commenced After August 17, 1971
	(Boiler capacity below 250 million Btu/hr)
NSPS Subpart	Standards of Performance for Electric Utility Steam Generating Units for Which
Da	Construction Is Commenced After September 18, 1978
	(Boiler capacity below 250 million Btu/hr)
NSPS Subpart	Standards of Performance for Industrial-Commercial Institutional Steam Generating Units,
Db,	Standard for Sulfur Dioxide
4 0 CFR	(Boilers exclusively combust natural gas)
60.42b	
NSPS Subpart	Standards of Performance for Industrial Commercial Institutional Steam Generating Units,
Db,	Standard for Particulate
4 0 CFR	(Boilers exclusively combust natural gas)
60.43b	
NSPS Subpart	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating
Ðe	Units
	(Boilers built before 6/9/89 and not modified or reconstructed since 6/9/89)

B. SUBSUMED REQUIREMENTS

The facility has not identified any subsumed requirements to be included in a permit shield.

Pursuant to District Regulations 2-6-233 and 2-6-409.12, as of the date this permit is issued, the federally enforceable "subsumed" regulations and/or standards cited in the following table 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.

Subsumed			
Requirement		Streamlined	
Citation	Title or Description	Requirements	Title or Description
NSPS	General Provisions		
Subpart A			
40-CFR	Continuous Monitoring Systems	PSD Permit	BAAQMD permit condition
60.7(c)			# 21961, Part VII, E: Continuous
			Emission Monitoring
4 0 CFR	Summary Report Forms	PSD Permit	BAAQMD permit condition
60.7(d)			# 21961, Part VII, E: Continuous
			Emission Monitoring
40 CFR	Records	PSD Permit	BAAQMD permit condition
60.7(e)			# 21961, Part VII, E: Continuous
			Emission Monitoring
40 CFR	Notification to Local Agency	PSD Permit	BAAQMD permit condition
60.7(f)			# 21961, Part VII, E: Continuous
			Emission Monitoring
40 CFR	Special Provisions	PSD Permit	BAAQMD permit condition
60.7(g)			# 21961, Part VII, E: Continuous
			Emission Monitoring

Table X-B-1 S-101, S-102, Boilers

X. Permit Shield

Table X-B-1 S-101, S-102, Boilers

Subsumed			
Requirement		Streamlined	
Citation	Title or Description	Requirements	Title or Description
40 CFR 60.13	Monitoring Requirements	PSD Permit	BAAQMD permit condition
			# 21961, Part VII, E: Continuous
			Emission Monitoring
NSPS	Standards of Performance for		
Subpart Db	Industrial-Commercial-		
	Institutional Steam Generating		
	Units		
4 0 CFR	Compliance and performance test	BACT	BAAQMD Permit condition #2780,
60.46b	methods and procedures for	monitoring for	Parts 11 and 14
	particulate matter and nitrogen	NO _*	
	oxides		
40 CFR	Emission monitoring for	BACT	BAAQMD Permit condition #2780,
60.48b	particulate matter and nitrogen	monitoring for	Parts 11 and 14
	oxides	NO _*	
4 0 CFR	Reporting and recordkeeping	BACT	BAAQMD Permit condition #2780,
60.49b	requirements	monitoring for	Parts 11 and 14
		NO _*	

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), and also 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 40 CFR Part 63.

Major Facility

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

MFR

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

MOP

The District's Manual of Procedures.

NAAQS

National Ambient Air Quality Standards

NESHAPS

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

NH3

Ammonia

NMHC Non-methane Hydrocarbons

NO_x

Oxides of nitrogen.

XI. Glossary

NSPS

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

NSR

New Source Review. A federal program for preconstruction review and permitting of new and modified sources of air pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NO_x, PM₁₀, and SO₂.

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

Total Particulate Matter

PM₁₀

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

PSD

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

SCR

Selective Catalytic Reduction. Catalytic control for oxides of nitrogen

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

XI. Glossary

the Act.

SO_2

Sulfur dioxide

Title V

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

TRMP

Toxic Risk Management Plant

TSP

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^2	=	square meter
min	=	minute
mm	=	million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year

XII. REVISION HISTORY

	Date	Action	Details
	May 12, 1998	Initial Issuance	
	December 18, 1998	Significant modification (Application 18872)	CO limit changed from destruction efficiency basis to concentration basis.
	July 26, 2000	Minor modification (Application 445)	Replacement of components, increase in capacity and efficiency, minor increase in emissions.
	October 23, 2001	Significant revision (Application 2686)	Addition of three gas-turbine peaker units. Capacity increased by 135 MW. Major increase in emissions. Added existing cooling tower (S-104). Revisions to facility wide SO ₂ , PM, and CO limits. Issuance of Phase II Acid Rain permit.
	March 6, 2003	Administrative Amendment (No application)	Changed name of facility from "Calpine Gilroy Cogen, L.P." to "Calpine Gilroy Cogen, L.P. and Gilroy Energy Center, LLC." Changed name on Acid Rain permit from "Calpine Gilroy Cogen, L.P." to "Gilroy Energy Center, LLC". "Cond# 18202" was corrected to "Cond# 18102" on page 64.
	March 16, 2006	Renewal Issuance (Application 6748)	
	December 28, 2007	Minor revision (Application 12930)	Changed annual source test requirement to once every 8,000 hrs of operation or every three years, whichever comes first.
	December, 2010	<u>Minor revision</u> (Application 22302)	<u>Revised permit conditions 2780, 21961 for dry</u> <u>Low NO_x combustor installation on S-100.</u>
	<u>TBD, 2012</u>	Renewal Issuance (Application 22569)	