

Bay Area Air Quality Management District

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

Final

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) 385-7942

Facility Contact

Maria Barroso,
EHS Specialist II
(831) 385-7943

Alternate Responsible Official

Lance Null, Plant Engineer, (408) 337-3430
Maria Barroso, Environmental Health & Safety Specialist II, (831) 385-7943

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

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jim Karas, P.E. _____
Jim Karas, P.E., Director of Engineering Division

November 5, 2013
Date

TABLE OF CONTENTS

I.	STANDARD CONDITIONS	3
II.	EQUIPMENT LIST	8
III.	GENERALLY APPLICABLE REQUIREMENTS	10
IV.	SOURCE-SPECIFIC APPLICABLE REQUIREMENTS	14
V.	SCHEDULE OF COMPLIANCE.....	42
VI.	PERMIT CONDITIONS.....	42
VII.	APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS ...	62
VIII.	TEST METHODS	79
IX.	TITLE IV ACID RAIN PERMIT	82
X.	PERMIT SHIELD.....	95
	A. NON-APPLICABLE REQUIREMENTS	95
	B. SUBSUMED REQUIREMENTS.....	96
XI.	GLOSSARY	97
XII.	REVISION HISTORY.....	101

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);

BAAQMD 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 April 18, 2012 and expires on April 17, 2017. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than October 17, 2017 and no earlier than April 17, 2016. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after April 17, 2017.** If the permit renewal has not been issued by April 17, 2017, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (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)

I. Standard Conditions

3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (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)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions 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).

I. Standard Conditions

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 1st through April 30th. The certification shall be submitted by May 31st of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of

I. Standard Conditions

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 not 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 plan (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.

I. Standard Conditions

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 CO₂ 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)
100	Nominal 87 MW Gas Turbine Generator, Natural Gas 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

Table II-B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
3	Oxidation catalyst	3	BAAQMD Condition #18102 part 19.3 & 19.4		CO < 6 ppm POC < 2 ppm
4	Selective Catalytic Reduction System	3	BAAQMD Condition #18102 part 19.1		NO _x < 5 ppm
5	Oxidation catalyst	4	BAAQMD Condition #18102 part 19.3 & 19.4		CO < 6 ppm POC < 2 ppm
6	Selective Catalytic Reduction System	4	BAAQMD Condition #18102 part 19.1		NO _x < 5 ppm
7	Oxidation catalyst	5	BAAQMD Condition #18102 part 19.3 & 19.4		CO < 6 ppm POC < 2 ppm
8	Selective Catalytic Reduction System	5	BAAQMD Condition #18102 part 19.1		NO _x < 5 ppm
100	Oxidation Catalyst	S100	BAAQMD Condition #2780 part 3	All conditions except startup and shutdown	CO < 10 ppm
101	Selective Catalytic Reduction Unit	S-101	BAAQMD Condition 25512 part 2		NO _x ≤ 5 ppm
102	Selective Catalytic Reduction Unit	S-102	BAAQMD Condition 25512 part 2		NO _x ≤ 5 ppm

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

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

The full language of SIP requirements is on EPA Region 9's website. The address is <http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+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 both versions of the rule until US EPA has reviewed and approved the District's revision of the regulation.

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (7/19/06)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (7/19/06)	N
SIP Regulation 2, Rule 1	General Requirements (1/26/99)	Y
BAAQMD 2-1-429	Federal Emissions Statement (12/21/04)	Y

III. Generally Applicable Requirements

Table 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)	Y
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)	Y
BAAQMD Regulation 2, Rule 4	Permits, Emissions Banking (12/21/04)	N
SIP Regulation 2, Rule 4	Permits, Emissions Banking (01/26/99)	Y
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)	Y
BAAQMD Regulation 2, Rule 9	Permits, Interchangeable Emission Reduction Credits (6/15/05)	N
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 (3/6/02)	N
SIP Regulation 5	Open Burning (9/4/98)	
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (12/5/07)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
BAAQMD Regulation 7	Odororous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)	N
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (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 Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	Y
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y

III. Generally Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05)	Y
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	Y
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	N
California Health and Safety Code Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater	N
40 CFR Part 60 Subpart GG	Standards of Performance for Stationary Gas Turbines (2/24/06)	Y
40 CFR Part 60, Subpart KKKK	Standards of Performance for Stationary Combustion Turbines (7/6/06)	Y

III. Generally Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (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)	Y
Title 40 Part 82 Subpart H 82.270(b)	Prohibitions, Halon (03/05/98)	Y

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

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

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

1. BAAQMD regulation(s):
 The date(s) of adoption or most recent amendment of the regulation by the District Board 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

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

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)		
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	

IV. Source-Specific Applicable Requirements

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
1-522.5	Calibration	Y	
1-522.6	Accuracy	Y	
1-522.7	Excesses	N	
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	Regulation 2, Rule 1 - Permits, General Requirements (7/19/06)		
2-1-501	Monitors	Y	
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (12/5/07)		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	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	

IV. Source-Specific Applicable Requirements

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 Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/6/06)		
9-9-113	Exemption – Inspection/Maintenance	N	
9-9-114	Exemption – Start-Up/Shutdown	N	
9-9-301.1.3	Emission Limits- Turbines Rated ≥ 10 MW w/SCR, $\text{NO}_x \leq 9$ ppm	N	
9-9-301.2	Emission Limits, General, > 250 to 500 MMBtu/hr, 0.43 lbs/MWhr or 9 ppmv	N	
9-9-401	Certification, Efficiency	N	
9-9-501	Monitoring and recordkeeping requirements	N	
SIP Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/15/97)		
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 Subpart A	Standards of Performance for New Stationary Sources (1/28/09)	Y	
60.7	Written notification	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
Subpart GG	Standards of Performance for Stationary Gas Turbines (2/24/06)		
60.330	Applicability and designation of affected facility	Y	

IV. Source-Specific Applicable Requirements

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
60.330(a)	All stationary gas turbines with a heat input greater than 10 MMBtu/hour.	Y	
60.330(b)	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	
60.332	Standard for nitrogen oxides	Y	
60.332(a)(1)	NO _x limit	Y	
60.333	Standard for sulfur dioxide	Y	
60.333(a)	SO ₂ Concentration < 0.015 percent @15% O ₂ (Turbine Only)	Y	
60.333(b)	Fuel Sulfur Content cannot exceed 0.8 percent by weight (Turbine Only)	Y	
60.334	Monitoring of operations	Y	
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	
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)	Y	
60.334(j)(1)(iii)	NO _x Excess Emissions and Monitor Downtime reporting requirements	Y	
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 Appendix F	Quality Assurance Procedures		
Procedure 1	Quality assurance requirements for gas continuous emission monitoring systems used for compliance determination	Y	
40 CFR Part 72	Title IV – Acid Rain Program	Y	

IV. Source-Specific Applicable Requirements

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

IV. Source-Specific Applicable Requirements

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
72.31(e)	If the Acid Rain permit application is for Phase II and the unit is a new unit, the date that the unit has commenced or will commence operation and the deadline for monitor certification.	Y	
72.32	Permit application shield and binding effect of permit application	Y	
	Subpart E – Acid Rain Permit Contents		
72.50	General	Y	
72.50(a)	Acid Rain Permits	Y	
72.50(a)(1)	Permits must contain all elements of complete Acid Rain Application under 40 CFR 72.31	Y	
72.50(b)	Permits include terms in 40 CFR 72.2	Y	
72.51	Permit Shield	Y	
40 CFR Part 75	Code of Federal Regulations, Continuous Emissions Monitoring	Y	
	Subpart A – General	Y	
75.2	Applicability	Y	
75.2(a)	Applicability to affected units subject to Acid Rain emission limitations	Y	
75.4	Compliance Dates	Y	
75.4(b)	New affected unit (at the time of the commencement of commercial 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	Y	
75.4(b)(2)	The earlier of 90 unit operating days or 180 calendar days after the date the unit commences commercial operation, notice of which date shall be provided under subpart G of this part.	Y	
75.5	Prohibitions	Y	
	Subpart B – Monitoring Provisions	Y	
75.10	General Operating Requirements	Y	
75.10(a)	Primary Measurement Requirement	Y	
75.10(a)(1)	SO ₂ Emissions, except as provided in §§75.11 and 75.16 and subpart E of this part	Y	
75.10(a)(2)	NO _x Emissions, except as provided in §§75.12 and 75.17 and subpart E of this part	Y	
75.10(a)(3)	CO ₂ Emissions	Y	

IV. Source-Specific Applicable Requirements

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
75.10(a)(3)(ii)	CO ₂ Emissions estimated using Carbon Content of fuel and procedures in Appendix G.	Y	
75.10 (a)(4)	Opacity Monitoring, except as provided in §§75.14 and 75.18	Y	
75.10(b)	Primary Equipment Performance Requirements	Y	
75.10(c)	Heat Input Rate Measurement Requirement	Y	
75.10(d)	Primary equipment hourly operating requirements	Y	
75.10(d)(1)	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	Y	
75.10(f)	Minimum measurement capability requirement	Y	
75.10(g)	Minimum recording and recordkeeping requirements	Y	
75.11	Specific provisions for monitoring SO ₂ emissions	Y	
75.11(d)	Gas-fired and oil-fired units	Y	
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.	Y	
75.12	Specific provisions for monitoring NO _x emission rate	Y	
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	Y	
75.13	Specific provisions for monitoring CO ₂ emissions	Y	
75.13(b)	Determination of CO ₂ emissions using Appendix G	Y	
75.14	Specific Provisions for monitoring opacity	Y	
75.14(c)	Gas-Fired Units Exempt from Opacity Monitoring	Y	
	Subpart C – Operation and Maintenance Requirements	Y	
75.20	Initial certification and recertification procedures	Y	
75.20(a)	Initial certification and approval process	Y	
75.20(b)	Recertification approval process	Y	
75.20(c)	Initial certification and recertification procedures	Y	
75.20(g)	Initial certification and recertification procedures for excepted monitoring systems under appendices D and E	Y	
75.21	Quality assurance and quality control requirements	Y	
75.21(a)	Continuous emission monitoring systems	Y	
75.21(c)	Calibration gases	Y	
75.21(d)	Notification for periodic Relative Accuracy Test Audits	Y	

IV. Source-Specific Applicable Requirements

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

IV. Source-Specific Applicable Requirements

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
75.57(d)	NO _x emission record provisions	Y	
75.57(e)	CO ₂ emission record provisions	Y	
75.57(g)	Diluent record provisions	Y	
75.57(h)	Missing data records	Y	
75.58	General recordkeeping provisions for specific situations	Y	
75.58(b)	Specific parametric data record provisions for calculating substitute emissions data for units with add-on emission controls	Y	
75.58(c)	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 §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	Y	
75.59	Certification, quality assurance, and quality control record provisions	Y	
75.59(a)	Continuous emission or opacity monitoring systems	Y	
75.59(b)	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.	Y	
75.59(c)	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	
75.59(f)	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).)	Y	
	Subpart G – Reporting Requirements	Y	
75.60	General Provisions	Y	

IV. Source-Specific Applicable Requirements

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
75.61	Notifications	Y	
75.62	Monitoring plan submittals	Y	
75.63	Initial certification or recertification application	Y	
75.64	Quarterly reports	Y	
75.66	Petitions to the administrator	Y	
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)	N	
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	
part 24	Monitoring requirements (Cumulative Increase, BACT, 40 CFR 75, 40 CFR 60)	Y	
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	

IV. Source-Specific Applicable Requirements

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
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	

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.

IV. Source-Specific Applicable Requirements

**Table IV-B
 S-100 – GAS TURBINE**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)		
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 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	Regulation 2, Rule 1 – Permits, General Requirements (7/19/06)		
2-1-501	Monitors	Y	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/5/07)		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310.3	Particulate Weight Limitation	N	
6-1-401	Appearance of Emissions	N	

IV. Source-Specific Applicable Requirements

**Table IV-B
 S-100 – GAS TURBINE**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310.3	Particulate Weight Limitation	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 Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/6/06)		
9-9-113	Exemption – Inspection/Maintenance	N	
9-9-114	Exemption – Start-Up/Shutdown	N	
9-9-301	Emission Limits – General	N	
9-9-301.1.2	Emission Limits- Turbines Rated \geq 10 MW no SCR,	N	
9-9-301.2	Emission Limits, General, > 500 MMBtu/hr, 0.15 lbs/MWhr or 5 ppmv	N	
9-9-401	Certification, Efficiency	N	
9-9-501	Monitoring and recordkeeping requirements	N	
SIP Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/15/97)		
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 Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
40 CFR 60 Subpart A	Standards of Performance for New Stationary Sources (12/23/71)	Y	
60.7	Notification and Recordkeeping	Y	
60.8	Performance Tests	Y	

IV. Source-Specific Applicable Requirements

Table IV-B
S-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards in this part	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 Appendix F	Quality Assurance Procedures		
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 (2/24/06)		
60.330	Applicability and designation of affected facility	Y	
60.330(a)	All stationary gas turbines with a heat input greater than 10 MMBtu/hour.	Y	
60.330(b)	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	
60.332	Standard for nitrogen oxides	Y	
60.332(a)(1)	NO _x limit	Y	
60.333	Standard for sulfur dioxide	Y	
60.333(a)	SO ₂ Concentration < 0.015 percent @15% O ₂ (Turbine Only)	Y	
60.333(b)	Fuel Sulfur Content cannot exceed 0.8 percent by weight (Turbine Only)	Y	
60.334	Monitoring of operations		
60.334(b)	Requirements for CEMS consisting of NO _x and O ₂ monitors installed at turbines which use steam injection that were constructed, reconstructed, or modified after October 3, 1977, but before July 8, 2004	Y	

IV. Source-Specific Applicable Requirements

**Table IV-B
 S-100 – GAS TURBINE**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.334(c)	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 limit under 60.332 that approved procedure may continue to be used.	Y	
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)	Y	
60.334 (j)(1)(iii)	Nitrogen oxides: Excess emissions and monitor downtime reporting requirements for turbines using NO _x and diluent CEMS	Y	
60.335	Test Methods and Procedures	Y	
40 CFR 72	Title IV - Acid Rain Program	Y	
	Subpart A – Acid Rain Program General Requirements		
72.6	Applicability	Y	
72.6(a)(3)	New utility unit (at the time of commencement of commercial operation)	Y	
72.9	Standard Requirements	Y	
72.9(a)	Permit Requirements	Y	
72.9(a)(1)(i)	Submittal of a complete acid rain permit application	Y	
72.9(a)(1)(iii)	Submittal of information in a timely manner	Y	
72.9(a)(2)(i)	Operation in compliance with Acid Rain permit	Y	
72.9(a)(2)(ii)	Have an Acid Rain Permit	Y	
72.9(b)	Monitoring Requirements	Y	
72.9(c)	Sulfur Dioxide Requirements	Y	
72.9(c)(1)	Requirement to hold allowances as of allowance transfer deadline	Y	
72.9(c)(2)	Each ton of excess SO ₂ emissions is a separate violation of the CAA	Y	
72.9(c)(3)	Initial deadline to hold allowances	Y	
72.9(c)(3)(iv)	Deadline at time of monitor certification	Y	
72.9(c)(4)	Use of Allowance Tracking System	Y	
72.9(c)(5)	Allowances may not be deducted prior to year for which allowance was allocated	Y	
72.9(c)(6)	Limited authorization	Y	

IV. Source-Specific Applicable Requirements

Table IV-B
S-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
72.9(d)	Nitrogen Oxide Requirements	Y	
72.9(e)	Excess emissions requirements	Y	
72.9(f)	Recordkeeping and Reporting Requirements	Y	
72.9(g)	Liability	Y	
72.9(h)	Effect on Other Authorities	Y	
	Subpart C – Acid Rain Permit Applications		
72.30(a)	Requirement to apply	Y	
72.30(c)	Duty to reapply. Requirement to submit complete acid rain application 6 months prior to expiration of current acid rain permit.	Y	
72.31	Information requirements for Acid Rain permit applications	Y	
72.31(a)	Identification of affected source	Y	
72.31(b)	Identification of each affected emissions unit	Y	
72.31(c)	Complete compliance plan	Y	
72.31(d)	Standard requirements under 40 CFR 72.9	Y	
72.31(e)	If the Acid Rain permit application is for Phase II and the unit is a new unit, the date that the unit has commenced or will commence operation and the deadline for monitor certification.	Y	
72.32	Permit application shield and binding effect of permit application	Y	
	Subpart E – Acid Rain Permit Contents		
72.50	General	Y	
72.50(a)	Acid Rain Permits	Y	
72.50(a)(1)	Permits must contain all elements of complete Acid Rain Application under 40 CFR 72.31	Y	
72.50(b)	Permits include terms in 40 CFR 72.2	Y	
72.51	Permit Shield	Y	
40 CFR Part 75	Code of Federal Regulations, Continuous Emissions Monitoring	Y	
	Subpart A – General	Y	
75.2	Applicability	Y	
75.2(a)	Applicability to affected units subject to Acid Rain emission limitations	Y	
75.4	Compliance Dates	Y	

IV. Source-Specific Applicable Requirements

**Table IV-B
 S-100 – GAS TURBINE**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.4(b)	New affected unit (at the time of the commencement of commercial 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	Y	
75.4(b)(2)	The earlier of 90 unit operating days or 180 calendar days after the date the unit commences commercial operation, notice of which date shall be provided under subpart G of this part.	Y	
75.5	Prohibitions	Y	
	Subpart B – Monitoring Provisions	Y	
75.10	General Operating Requirements	Y	
75.10(a)	Primary Measurement Requirement	Y	
75.10(a)(1)	SO ₂ Emissions, except as provided in §§75.11 and 75.16 and subpart E of this part	Y	
75.10(a)(2)	NO _x Emissions, except as provided in §§75.12 and 75.17 and subpart E of this part	Y	
75.10(a)(3)	CO ₂ Emissions	Y	
75.10(a)(3)	CO ₂ Emissions estimated using Carbon Content of fuel and procedures in (ii) Appendix G.	Y	
75.10 (a)(4)	Opacity Monitoring, except as provided in §§75.14 and 75.18	Y	
75.10(b)	Primary Equipment Performance Requirements	Y	
75.10(c)	Heat Input Rate Measurement Requirement	Y	
75.10(d)	Primary equipment hourly operating requirements	Y	
75.10(d)(1)	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	Y	
75.10(f)	Minimum measurement capability requirement	Y	
75.10(g)	Minimum recording and recordkeeping requirements	Y	
75.11	Specific provisions for monitoring SO ₂ emissions	Y	
75.11(d)	Gas-fired and oil-fired units	Y	
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.	Y	
75.12	Specific provisions for monitoring NO _x emission rate	Y	
75.12(a)	NO _x continuous emission monitor and diluent monitoring requirement	Y	

IV. Source-Specific Applicable Requirements

Table IV-B
S-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.12(c)	NO _x mass emission rate determination according to Appendix F	Y	
75.13	Specific provisions for monitoring CO ₂ emissions	Y	
75.13(b)	Determination of CO ₂ emissions using Appendix G	Y	
75.14	Specific Provisions for monitoring opacity	Y	
75.14(c)	Gas-Fired Units Exempt from Opacity Monitoring	Y	
	Subpart C – Operation and Maintenance Requirements	Y	
75.20	Initial certification and recertification procedures	Y	
75.20(a)	Initial certification and approval process	Y	
75.20(b)	Recertification approval process	Y	
75.20(c)	Initial certification and recertification procedures	Y	
75.20(g)	Initial certification and recertification procedures for excepted monitoring systems under appendices D and E	Y	
75.21	Quality assurance and quality control requirements	Y	
75.21(a)	Continuous emission monitoring systems	Y	
75.21(c)	Calibration gases	Y	
75.21(d)	Notification for periodic Relative Accuracy Test Audits	Y	
75.21(e)	Consequences of audits	Y	
75.22	Reference test methods	Y	
75.24	Out-of-control periods and adjustment for system bias	Y	
	Subpart D – Missing Data Substitution Procedures	Y	
75.30	General Provisions	Y	
75.30(a)	Owner/operator shall provide substitute data for each affected unit using a continuous emission monitor according to this subpart whenever the unit is combusting fuel.	Y	
75.31	Initial missing data procedures	Y	
75.32	Determination of monitor data availability for standard missing data procedures	Y	
75.33	Standard missing data procedures for SO, NO, Hg, and flow rate	Y	
75.33(a)	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 the data substitution procedures in paragraph (b) and (c) of this section.	Y	
75.33(c)	Volumetric flow rate, NO _x emission rate and NO _x concentration data	Y	
75.34	Units with add-on emission controls	Y	

IV. Source-Specific Applicable Requirements

Table IV-B
S-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.35	Missing data procedures for CO ₂	Y	
75.36	Missing data procedures for heat input rate determinations	Y	
	Subpart F – Recordkeeping Requirements	Y	
75.53	Monitoring plan	Y	
75.53(a)	General provisions	Y	
75.53(b)	Updates to monitoring plan	Y	
75.53(e)	Contents of monitoring plan	Y	
75.53(f)	Contents of monitoring plan for specific situations	Y	
75.53(g)	Contents of the monitoring plan after January 1, 2009	Y	
75.53(h)	Contents of monitoring plan for specific situations	Y	
75.57	General recordkeeping provisions	Y	
75.57(a)	General recordkeeping provisions for affected sources	Y	
75.57(b)	Operating parameter record provisions. The owner or operator shall record for each hour the following information on unit operating time, heat input rate, and load, separately for each affected unit.	Y	
75.57(c)	SO ₂ emission record provisions	Y	
75.57(d)	NO _x emission record provisions	Y	
75.57(e)	CO ₂ emission record provisions	Y	
75.57(g)	Diluent record provisions	Y	
75.57(h)	Missing data records	Y	
75.58	General recordkeeping provisions for specific situations	Y	
75.58(b)	Specific parametric data record provisions for calculating substitute emissions data for units with add-on emission controls	Y	
75.58(c)	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 §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	Y	
75.59	Certification, quality assurance, and quality control record provisions	Y	
75.59(a)	Continuous emission or opacity monitoring systems	Y	

IV. Source-Specific Applicable Requirements

Table IV-B
S-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.59(b)	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.	Y	
75.59(c)	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	
75.59(f)	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).)	Y	
	Subpart G – Reporting Requirements	Y	
75.60	General Provisions	Y	
75.61	Notifications	Y	
75.62	Monitoring plan submittals	Y	
75.63	Initial certification or recertification application	Y	
75.64	Quarterly reports	Y	
75.66	Petitions to the administrator	Y	
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)	N	
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	
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	

IV. Source-Specific Applicable Requirements

Table IV-B
S-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
Part 9b	Continuous Monitoring of Fuel Fired (basis: PSD, 2-1-403)	Y	
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 Condition # 14299			
Part 1	Exclusive use of natural gas (2-1-403)	Y	
BAAQMD Condition # 21961	PSD Permit		
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(ii)	Air Pollution Control Equipment after the installation of the Dry Low NO _x combustors.	N	
IX, C	Emission Limits for NO _x	Y	
IX, D	Performance Tests	Y	
IX, E	Continuous Emission Monitoring	Y	

IV. Source-Specific Applicable Requirements

Table IV-B
S-100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
IX, E, 1(b)	Continuous Emission Monitoring after the installation of the Dry Low NO _x combustors.	N	
IX, G	New Source Performance Standards	Y	

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.

IV. Source-Specific Applicable Requirements

**Table IV-C
 S-101, S-102 – BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)		
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 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	Regulation 2, Rule 1 - Permits, General Requirements (7/19/06)		
2-1-501	Monitors	Y	
BAAQMD Regulation 6, Rule 1	Particulate Matter and Visible Emissions (12/5/07)		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	

IV. Source-Specific Applicable Requirements

**Table IV-C
 S-101, S-102 – BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
6-1-310.3	Heat transfer equipment	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
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 Regulation 9, Rule 7	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (7/30/08)		
9-7-301	Emission Limits-Gaseous Fuel	N	
9-7-301.1	Emission Limits NO _x	N	
9-7-301.4	Emission Limits CO	N	
9-7-307.6	Emission Limit NO _x	N	1/1/2014 1 st Unit, 1/1/2015 2 nd Unit
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	
SIP Regulation 9, Rule 7	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (9/15/93)		
9-7-301	Emission Limits-Gaseous Fuel	Y	
9-7-301.1	Emission Limits-NO _x	Y	
9-7-301.2	Emission Limits-CO	Y	
9-7-303	Emission Limits-Gaseous Fuels-and Non-Gaseous Fuel	Y	

IV. Source-Specific Applicable Requirements

**Table IV-C
 S-101, S-102 – BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)		
40 CFR 60 Subpart A	Standards of Performance for New Stationary Sources (12/23/71)	Y	
	General Provisions	Y	
60.7	Notification and record keeping	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11	Compliance with standards and maintenance requirements	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 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	
60.40b	Applicability and delegation of authority		

IV. Source-Specific Applicable Requirements

**Table IV-C
 S-101, S-102 – BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.40b(a)	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	Standard for nitrogen oxides (NO _x)		
60.44b(a)(4)	NO _x Emission Limit	Y	
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)	Y	
60.46b	Compliance and performance test methods and procedures for particulate matter and nitrogen oxides		
60.46b(a)	NO _x limits apply at all times	Y	
60.46b(c)	Compliance with NO _x limit	Y	
60.46b(e)	Performance test for NO _x	Y	
60.48b	Emission monitoring for particulate matter and nitrogen oxides		
60.48b(b)	CEMs for NO _x Standard, except as provided in (g), (h), and (i) of this section	Y	
60.49b	Reporting and recordkeeping requirements		
60.49b(a)	Notification of Initial Startup	Y	
60.49b(b)	Submission of Performance Test Reports and CEM performance evaluation	Y	
60.49b(d)	Fuel records	Y	
60.49b(g)	Records for each day of operation	Y	
60.49b(h)(2)	Excess emission reports	Y	
60.49b(o)	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	
part 13b	Sampling ports (BAAQMD 1-501)	Y	
part 14	Recordkeeping (basis: PSD, BACT)	Y	
part 18	Hours of Operation (basis: Cumulative increase)	Y	

IV. Source-Specific Applicable Requirements

Table IV-C
S-101, S-102 – BOILERS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 14299			
Part 1	Exclusive use of natural gas (2-1-403)	Y	
BAAQMD Condition #25512			
part 1	NOx limit until SCR is operational (9-7-301.1)	N	
part 2	NOx limit after SCR is operational (9-7-307.6)	N	
part 3	CEM requirement (1-521, 2-1-403)	N	
part 4	Ammonia slip limit (2-5)	N	
part 5	Ammonia slip source test requirement (2-5)	N	
part 6	Combined hour limit for both boilers (2-5, 2-1-403)	N	
part 7	Recordkeeping (2-6-501, 9-7-307.6)	N	
BAAQMD Condition # 21961	PSD Permit		
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	

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.

IV. Source-Specific Applicable Requirements

Table IV-D
S-104 – COOLING TOWER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	Particulate Matter and Visible Emissions (12/5/07)		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-311	General Operations	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)		
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	

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 (NO_x) 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 NO_x combustor becomes operational, the oxides of nitrogen (NO_x) 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 NO_x 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

VI. Permit Conditions

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. Deleted after DLN Operational on January 1, 2012.

1d. (Deleted under BAAQMD Application #445)

1e. Effective after startup of the modification proposed in Application #445, the oxides of nitrogen (NO_x) 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 SIP Regulation 9-9-114 or periods of inspection and maintenance pursuant to SIP 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 NO_x 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 NO_x 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 start-up, 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

VI. Permit Conditions

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 (NO_x) 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.

VI. Permit Conditions

- 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. Deleted after DLN Operational on January 1, 2012.
- 9a. Deleted after DLN Operational on January 1, 2012.
- 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

VI. Permit Conditions

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

VI. Permit Conditions

Corrected Concentration:	not to exceed 30 minutes. The concentration of any pollutant (generally NO _x , 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 NO_x 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 NO_x 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)

VI. Permit Conditions

13. Conflicts Between Conditions: 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)

17. Operations: 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)

18. Visible Emissions: 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 (NO_x) 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 NO_x 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

VI. Permit Conditions

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 (PM₁₀) 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 PM₁₀ mass emission rate shall be verified during any required source test. (basis: BACT & cumulative increase)
- 19.6 Oxides of sulfur emissions (SO_x) from the gas turbine shall not exceed 0.33 pounds per hour. The SO_x 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.

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

Pollutant	Daily (lb)	Annual (tons)
NO _x (as NO ₂)	604.8	39.5
POC	84	6.9
CO	446.1	36.0

VI. Permit Conditions

SO _x (as SO ₂)	23.8	1.9
PM ₁₀	180	14.7

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 NO_x, CO and O₂. Continuous emissions monitors shall comply with the requirements of 40 CFR Part 60, Appendices B and F, and 40

VI. Permit Conditions

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 District-approved 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 NO_x, CO, POC, and stack gas oxygen content shall be conducted in accordance with ARB Test Method 100; measurements of PM₁₀ shall be conducted in accordance with EPA 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 subsequent source tests shall include those parameters specified in the approved test protocol, and shall at a minimum include the following:

- a. NO_x (as NO_x) – 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. SO_x – 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)

VI. Permit Conditions

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

26. 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)
30. Recordkeeping: 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 NO_x and CO, emission concentrations and hourly ammonia injection rates and ammonia/NO_x 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. Reporting: 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);

VI. Permit Conditions

- (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. District Operating Permit: 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)

VI. Permit Conditions

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

VI. Permit Conditions

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)

VI. Permit Conditions

IX. Special Conditions

A. (deleted BAAQMD Title V application #25841)

B. Air Pollution Control Equipment

(i) Deleted after DLN Operational on January 1, 2012.

(ii) On and after the date of installation of Dry Low NO_x combustors at S100, Turbine, pursuant to Application 18434, the owner or operator shall use the Dry Low NO_x combustors to reduce emission of nitrogen oxides from the gas turbine.

C. Emission Limits for NO_x

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 NO_x in excess of 25 ppmv at 15% O₂ (3-hour average). (PSD)

This limit 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.

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 NO_x 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 NO_x and furnish the Bay Area Air Quality Management District and the EPA a written report of the

VI. Permit Conditions

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 NO_x, 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

1. 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. Deleted after DLN Operational on January 1, 2012
 - b. Continuous monitoring systems to measure stack gas NOX concentration, fuel usage, and either O₂ or CO₂ concentrations. The systems shall meet

VI. Permit Conditions

EPA monitoring performance specifications. Part 1.b shall apply after the installation of Dry Low NO_x 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

VI. Permit Conditions

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)

VI. Permit Conditions

COND# 25512 -----

Calpine Gilroy, L.P.
Facility #B1180
Application #25027
S-101, S-102

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

1. *Until each SCR is installed, tuned and becomes operational, but no later than 60 days after initial startup of each SCR unit, the owner/operator shall ensure that the nitrogen oxide (NOx) emissions from each auxiliary boiler (S-101, S-102) continue to meet 30 ppmvd at 3% oxygen averaged over any one-hour period, except during periods during startup and shutdown. (Basis: Regulation 9-7-301.1)
2. *Within 60 days of startup of each SCR, the owner/operator shall ensure that the nitrogen oxide (NOx) emissions from each auxiliary boiler (S-101, S-102) do not exceed 5 ppmvd at 3% oxygen averaged over any one-hour period, except during periods during startup and shutdown. (Basis: Regulation 9-7-307.6)
3. *The owner/operator shall monitor NOx and CO from each boiler with a District approved CEM system. (Basis: Regulation 1-521, 2-1-403)
4. *Within 60 days of startup of each SCR, the owner/operator shall ensure that the ammonia (NH3) emissions from each auxiliary boiler (S-101 and S-102) do not exceed 10 ppmv, on a dry basis, corrected to 3% O2, as measured with a District approved method, except during periods of startup and shutdown. (Basis: Regulation 2, Rule 5)
5. *Within 90 days of startup, the owner/operator shall have a District approved source test conducted for ammonia in the exhaust of each auxiliary boiler (S-101, S-102) and on an annual basis thereafter. The owner/operator shall submit the results of the District

VI. Permit Conditions

approved source test to the District Source Test Section within 60 days of the source test date. (Basis: Regulation 2, Rule 5)

6. *The owner/operator shall ensure that S-101 and S-102 do not operate more than 15,800 hours combined on a 12-month rolling average basis. (Basis: Regulation 2, Rule 5, Regulation 2-1-403)

7. *The owner/operator of S-101 and S-102 shall maintain records of hours of operation on a 12-month rolling average basis, fuel usage, the duration of each startup and shutdown event including emissions of NO_x and CO during each event, all CEM data, and source test records in a District-approved log. These records shall be retained on site for a minimum of five years from the date of entry and made available to District representatives upon request. (Basis: Regulation 2-6-501, Regulation 9-7-307.6)

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.

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
NO _x	BAAQMD 9-9-301.1.3	N		9 ppmv @ 15% O ₂ , dry	BAAQMD 9-9-501	C	CEMS
	BAAQMD 9-9-301.2	N		0.43 lb/MW-hr or 9 ppmv	BAAQMD 9-9-501	C	CEMS
NO _x	SIP 9-9-301.3	Y		9 ppmv @ 15% O ₂ , dry	BAAQMD 9-9-501 and BAAQMD condition #18102, part 24	C	CEMS

VII. Applicable Emission limits & Compliance Monitoring Requirements

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
	SIP 9-9-301.3	Y		9 ppmv @ 15% O ₂ , dry	BAAQMD condition #18102, part 25	P	Source testevery 8,000 hrs or every 3 yrs, which ever comes first
NO _x	NSPS, 40 CFR 60.332 (a)(1)	Y		99 ppmv @ 15% O ₂ , dry 4-hour rolling average (Arithmetic average of the 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)	NSPS, 40 CFR 60.334 (b)	C	CEMS
	None	Y		None	40 CFR 75.10	C	CEMS
	BAAQMD condition #18102, part 19.1	Y		5 ppmv @ 15% O ₂ , dry, 1-hr average except during turbine startup or shutdown	BAAQMD condition #18102, part 19.1, 24	C	CEMS
	BAAQMD condition #18102, part 19.1	Y		5 ppmv @ 15% O ₂ , dry, 1-hr average except during turbine startup or shutdown	BAAQMD condition #18102, part 25	P	Source testevery 8,000 hrs or every 3 yrs, which ever comes first
	BAAQMD condition #18102, part 22	Y		604.8 lb/calendar day (as NO ₂) for S-3, S-4, and S-5 combined	BAAQMD condition #18102, part 24	C	CEMS
NO _x	BAAQMD condition #18102, part 22	Y		39.5 tons per calendar year (as NO ₂) for S-3, S-4, and S-5 combined	BAAQMD condition #18102, part 24	C	CEMS

VII. Applicable Emission limits & Compliance Monitoring Requirements

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

VII. Applicable Emission limits & Compliance Monitoring Requirements

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
SO ₂	NSPS 40 CFR 60.333(a) or 60.333(b)	Y		SO ₂ in gases exiting turbine ≤ 0.015% (vol.) @15% O ₂ (dry) or Total sulfur in fuel combusted in turbines ≤ 0.8% by wt. (8000 ppmw)	NSPS, 40 CFR 60.334 (h)(1)	N	
SO ₂	None	Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measure- ments, calculations
SO ₂	BAAQMD condition #18102, part 19.6	Y		0.33 lb/clock hr for S-3, S-4, and S-5 combined	BAAQMD condition #18102, part 24	P/A	Total sulfur and hydrogen sulfide analysis
	BAAQMD condition #18102, part 19.6	Y		0.33 lb/clock hr for S-3, S-4, and S-5 combined	BAAQMD condition #18102, part 25	P	Source testevery 8,000 hrs or every 3 yrs, which ever comes first
SO ₂	BAAQMD condition #18102, part 22	Y		23.8 lb/calendar day for S- 3, S-4, and S-5 combined	BAAQMD condition #18102, part 24	P/A	Total sulfur and hydrogen sulfide analysis
	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	P/A	Total sulfur and hydrogen sulfide analysis

VII. Applicable Emission limits & Compliance Monitoring Requirements

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 23.b	Y		Total sulfur content in natural gas combusted in turbines $\leq 1.0 \text{ gr}/100 \text{ } \cancel{0.25} \text{ gr}/100 \text{ scf}$	BAAQMD condition #18102, part 24.e	P/Q	Analysis of total sulfur content in fuel
Opacity	BAAQMD 6-1-301	N		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	BAAQMD condition #18102, part 18	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour or equivalent 20% opacity		N	
FP	BAAQMD 6-1-310	N		0.15 grain/dscf		N	
FP	SIP 6-310	Y		0.15 grain/dscf		N	
PM ₁₀	BAAQMD condition #18102, part 19.5	Y		2.5 lb/clock hr for each turbine, except during turbine startup or shutdown	BAAQMD condition #18102, part 25	P	Source test every 8,000 hrs or every 3 yrs, which ever comes first
PM ₁₀	BAAQMD condition #18102, part 22	Y		180 lb/calendar day for S-3, S-4 & S-5 combined	BAAQMD condition #18102, part 25	P	Source Test every 8,000 hrs or every 3 yrs, which ever comes first, and fuel monitoring

VII. Applicable Emission limits & Compliance Monitoring Requirements

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
PM ₁₀	BAAQMD condition #18102, part 22	Y		14.7 tons/year for S-3, S-4 & S-5 combined	BAAQMD condition #18102, part 25	P	Source Test every 8,000 hrs or every 3 yrs, which ever comes first, and fuel monitoring
POC	BAAQMD condition #18102, part 19.4	Y		2 ppmv @ 15% O ₂ , dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #18102, part 19.4	P	Source test every 8,000 hrs or every 3 yrs, which ever comes first
POC	BAAQMD condition #18102, part 19.4	Y		2 ppmv @ 15% O ₂ , dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #18102, part 25	P	Source test every 8,000 hrs or every 3 yrs, which ever comes first
	BAAQMD condition #18102, part 22	Y		84 lb/calendar day for S-3, S-4, and S-5 combined	BAAQMD condition #18102, part 25	P	Source test every 8,000 hrs or every 3 yrs, which ever comes first, and fuel monitoring

VII. Applicable Emission limits & Compliance Monitoring Requirements

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
POC	BAAQMD condition #18102, part 22	Y		6.9 ton/calendar year for S-3, S-4, and S-5 combined	BAAQMD condition #18102, part 25	P	Source test every 8,000 hrs or every 3 yrs, which ever comes first, and fuel monitoring
NH3	BAAQMD condition #18102, Part 19.2	N		10 ppmv @ 15% O ₂ , dry, averaged over 3 hrs except during turbine startup or shutdown	BAAQMD condition #18102, parts 19.2 and 24, 25	C	Ammonia injection rate monitor, calculations, and periodic source testing every 8,000 hrs or every 3 yrs, which ever comes first
	BAAQMD condition #18102, Part 19.2	N		10 ppmv @ 15% O ₂ , dry, averaged over 3 hrs except during turbine startup or shutdown	BAAQMD condition #18102, part 25	P	Source test every 8,000 hrs or every 3 yrs, which ever comes first
Heat input limit	BAAQMD condition #18102, part 23	Y		500 MM BTU/clock hr (HHV) for each turbine, S-3, S-4, and S-5	BAAQMD condition #18102, part 24d	C	Fuel meter, firing monitor
	BAAQMD condition #18102, part 23	Y		500 MM BTU/clock hr (HHV), for each turbine, S-3, S-4, and S-5	BAAQMD condition #18102, part 24d	P/Q	Fuel composition analysis

VII. Applicable Emission limits & Compliance Monitoring Requirements

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
Heat input limit	BAAQMD condition #18102, part 23	Y		500 MM BTU/clock hr (HHV), for each turbine, S-3, S-4, and S-5	BAAQMD condition #18102, part 25	P	Source testevery 8,000 hrs or every 3 yrs, which ever comes first
Heat input limit	BAAQMD condition #18102, part 23	Y		12,000 MM BTU/day (HHV) for each turbine, S-3, S-4, and S-5	BAAQMD condition #18102, part 30.a	C	fuel meter, firing monitor, calculations
	BAAQMD condition #18102, part 23	Y		12,000 MM BTU/day (HHV) for each turbine, S-3, S-4, and S-5	BAAQMD condition #18102, part 24d	P/Q	Fuel composition analysis
Heat input limit	BAAQMD condition #18102, part 23	Y		5,494,300 MM BTU/yr, for S-3, S-4, and S-5, Turbines combined	BAAQMD condition #18102, part 30.a	C	fuel meter, firing monitor, calculations
Heat input limit	BAAQMD condition #18102, part 23	Y		5,494,300 MM BTU/yr, for S-3, S-4, and S-5, Turbines combined	BAAQMD condition #18102, part 24d	P/Q	Fuel composition analysis
MW				None	BAAQMD condition #18102, part 25	P	Source testevery 8,000 hrs or every 3 yrs, which ever comes first
Gas temperature				None	BAAQMD condition #18102, part 25	P	Source testevery 8,000 hrs or every 3 yrs, which ever comes first

VII. Applicable Emission limits & Compliance Monitoring Requirements

**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
Stack gas flow				None	BAAQMD condition #18102, part 25	P	Source test every 8,000 hrs or every 3 yrs, which ever comes first
NH3 injection rate				None	BAAQMD condition #18102, part 25	P/A	Source test every 8,000 hrs or every 3 yrs, which ever comes first

VII. Applicable Emission limits & Compliance Monitoring Requirements

Table VII-B
S-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 Type
NO _x	BAAQMD 9-9-301.1.2 and 9-9-401	N		< 15 ppmv* @ 15% O ₂ , dry, 3-hr average *corrected for efficiency	9-9-501	C	CEMS
NO _x	BAAQMD 9-9-301.2	N		< 5 ppmv @ 15% O ₂ , dry, 3-hr average or < 0.15 lbs/MWhr	9-9-501	C	CEMS
NO _x	SIP 9-9-305 and 9-9-401	Y		≤ 21.0 ppmv* @ 15% O ₂ , dry, 3-hr average *corrected for efficiency	BAAQMD 9-9-501	C	CEMS
	BAAQMD Permit Cond# 2780 part 1a(i)	Y		≤ 25 ppmv @ 15% O ₂ , 3-hr avg	BAAQMD Permit Condition 2780, part 11	C	CEMS
	BAAQMD Permit Cond# 2780, part 1a(ii)	Y		< 5 ppmv @ 15% O ₂ or 0.15 lb/MW-hr, 3-hr avg.	BAAQMD Permit Condition 2780, part 11	C	CEMS
	BAAQMD Permit Cond# 2780, part 1e	Y		≤ 21.0 ppmv @ 15% O ₂ , dry, calendar day average	BAAQMD 9-9-501	C	CEMS
NO _x	BAAQMD Permit Cond# 2780, part 1f	Y		< 323.7 tons per any twelve consecutive months	BAAQMD 9-9-501	C	CEMS
	BAAQMD Permit Cond# 2780, part 1g	Y		< 1876 lb per calendar day	BAAQMD 9-9-501	C	CEMS

VII. Applicable Emission limits & Compliance Monitoring Requirements

Table VII-B
S-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 Type
	BAAQMD permit condition # 21961, part IX-C.	Y		≤ 25 ppmv @ 15% O ₂ , dry 3-hr average	BAAQMD 9-9-501	C	CEMS
NO _x	BAAQMD permit condition # 21961, part IX-C.	Y		Natural Gas or Fuel Oil ≤ 25 ppmv @ 15% O ₂ , dry 3-hr average	BAAQMD permit condition # 21961, part IX-E.	C	CEMS
NO _x	NSPS, 40 CFR 60.332 (a)(1)	Y		82 ppmv @ 15% O ₂ , dry 4-hour rolling average (Arithmetic average of the 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)	NSPS, 40 CFR 60.334 (b) Note: 60.334(c) also applies after the installation of Dry Low NO _x Combustors on January 1, 2012	C	CEMS
	None	Y		None	40 CFR 75.10	C	CEMS
POC	BAAQMD Permit Condition 2780, part 6	Y		< 40 TPY NMHC for S-100, S-101, S-102		N	
SO ₂	None	Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations

VII. Applicable Emission limits & Compliance Monitoring Requirements

Table VII-B
S-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 Type
SO ₂	BAAQMD 9-1-301	Y		GLC ¹ of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
SO ₂	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
SO ₂	NSPS 40 CFR 60.333 (a) or 60.333(b)	Y		SO ₂ in gases exiting turbine ≤ 0.015% (vol.) @ 15% O ₂ (dry) or Total sulfur in fuel combusted in turbines ≤ 0.8% by wt. (8000 ppmw)	NSPS, 40 CFR 60.334 (h)(1)	N	
Opacity	BAAQMD 6-1-301	N		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-1-310.3	N		0.15 grain/dscf @ 6% O ₂		N	
FP	SIP 6-310.3	Y		0.15 grain/dscf @ 6% O ₂		N	
FP	BAAQMD Permit Condition 2780, part 6	Y		< 25 TPY total FP for S-100, S-101, S-102		N	
CO ₂		Y		None	40 CFR 75.10	C	CEMS (CO ₂) or CEMS (O ₂) or fuel flow monitor

VII. Applicable Emission limits & Compliance Monitoring Requirements

Table VII-B
S-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 Type
Carbon Monoxide	BAAQMD Permit Condition 2780, part 3b	Y		emissions < 100 tons/yr (for S-100, S-101, and S-102)	BAAQMD Permit Condition 2780, part 11	C	CEMS
Carbon Monoxide	BAAQMD Permit Condition 2780, part 3c	Y		10 ppmvd @ 15% O ₂ , 3-hr average, except during startup, shutdown, operation at < 80% load, and operation at low ambient temperature	BAAQMD Permit Condition 2780, part 11	C	CEMS
Carbon Monoxide	BAAQMD Permit Condition 2780, part 3d	Y		< 14670 lbs. CO during startups and shutdowns per any consecutive 12-month period	BAAQMD Permit Condition 2780, part 11	C	CEMS
	BAAQMD Permit Condition 2780, part 3e	Y		< 750 hours of operation at < 80% load per any consecutive 12-month period	BAAQMD Permit Condition 2780, part 11	C	CEMS
Carbon Monoxide	BAAQMD Permit Condition 2780, part 3e	Y		< 14.8 tons CO during operation at < 80% load per any consecutive 12-month period	BAAQMD Permit Condition 2780, part 11	C	CEMS
Carbon Monoxide	BAAQMD Permit Condition 2780, part 3f	Y		< 100 hours of operation at ambient temperatures < 35° F. per any consecutive 12-month period	BAAQMD Permit Condition 2780, part 11	C	CEMS
Carbon Monoxide	BAAQMD Permit Condition 2780, part 3f	Y		15 ppmvd @ 15% O ₂ , 1-hr average, during operation at low ambient temperature	BAAQMD Permit Condition 2780, part 11	C	CEMS

VII. Applicable Emission limits & Compliance Monitoring Requirements

¹ Ground Level Concentration

**Table VII-C
 S-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
NO _x	BAAQMD 9-7-301.1	N		30 ppmv @3%O ₂ , dry, 3-hr average	BAAQMD Permit Condition 2780, part 11	C	CEMS
	SIP 9-7-301.1	Y		30 ppmv @3%O ₂ , dry, 3-hr average	BAAQMD Permit Condition 2780, part 11, BAAQMD 1-520.1	C	CEMS
	BAAQMD 9-7-307.6	N		5 ppmv @3%O ₂ , dry, 3-hr average	BAAQMD Permit Condition 2780, part 11, BAAQMD Condition 25512 part 3, BAAQMD 1-520.1	C	CEMS
NO _x	BAAQMD Permit Condition 2780, part 4	Y		40 ppmv @ 3%O ₂ , dry,, 3-hr average	BAAQMD Permit Condition 2780, part 11	C	CEMS
	BAAQMD permit condition #21961, part IX-C	Y		≤ 40 ppmv @ 3% O ₂ , dry, 3-hr average	BAAQMD permit condition # 21961, part IX-D.	C	CEMS
	BAAQMD Condition 25512 part 2	N		5 ppmv @3%O ₂ , dry, 3-hr average	BAAQMD Condition 25512 part 3	C	CEMS

VII. Applicable Emission limits & Compliance Monitoring Requirements

Table VII-C
S-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
NO _x	NSPS 60.44b(a)	Y		0.2 lb/MM Btu, averaged over 24 hrs		N	
CO	BAAQMD 9-7-301.4	N		400 ppmv @ 3% O ₂ , dry, 3-hr average		N	
CO	SIP 9-7-301.2	Y		400 ppmv @ 3% O ₂ , dry, 3-hr average		N	
	BAAQMD Permit Condition 2780, part 3b	Y		< 100 tons per year, for S-100, S-101, and S-102	BAAQMD Permit Condition 2780, part 11	C	CEMS
SO ₂	BAAQMD 9-1-301	Y		GLC ¹ of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
Opacity	BAAQMD 6-1-301	N		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-1-310.3	N		0.15 grain/dscf @ 6% O ₂		N	
FP	SIP 6-310.3	Y		0.15 grain/dscf @ 6% O ₂		N	
FP	BAAQMD Permit Condition 2780, part 6	Y		< 25 TPY FP for S-100, S-101, S-102		N	

VII. Applicable Emission limits & Compliance Monitoring Requirements

**Table VII-C
 S-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
POC	BAAQMD Permit Condition 2780, part 6	Y		< 40 TPY NMHC for S-100, S-101, S-102		N	
NH3	BAAQMD Condition 25512 part 4	N		10 ppm @ 3 % O2	BAAQMD Condition 25512 part 5	P	Annual source test
Hours of operation	BAAQMD Permit Condition 2780, part 18	Y		Simultaneous use with the gas turbine < combined total of 28 boiler hours/day or 3950 boiler hours/year	none	P/E	Record-keeping
Hours of operation	BAAQMD Condition 25512 part 6	N		15,800 hours combined for S-101 and S-102	none	P/E	Record-keeping

¹ Ground Level Concentration

**Table VII-D
 S-104 – COOLING TOWER**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301	N		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-1-310	N		0.15 grain/dscf		N	

VII. Applicable Emission limits & Compliance Monitoring Requirements

**Table VII-D
 S-104 – COOLING TOWER**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	SIP 6-310	Y		0.15 grain/dscf		N	
	BAAQMD 6-1-311	Y		40 lbs/hr		N	
	SIP 6-311	Y		40 lbs/hr		N	

VIII. TEST METHODS

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

Table VIII
Test Methods

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

IV. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 9-9-503.2	Deadline for Demonstration of Compliance with §9-9-301	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 #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 Limit (basis: BACT)	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, 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 _x Limit	ARB Method 100 Procedures for Continuous Gaseous Emission Stack Sampling
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 Sampling
Part 19.4	POC Limit	ARB Method 100 Procedures for Continuous Gaseous Emission Stack Sampling
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
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 condition # 21961, part IX-C.	PSD permit, part IX-C.	EPA Method 7,-Determination of Nitrogen Oxide Emissions from Stationary Sources EPA Method 20-Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
NSPS Subpart GG	Standards of Performance for 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 60.8	40 CFR 60, Appendix A	EPA Method 7,-Determination of Nitrogen Oxide Emissions from 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: April 18, 2012 through April 17, 2017

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:

**Jim Karas, P.E.
Director of Engineering Division**

November 5, 2013
Date

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

DESIGNATED REPRESENTATIVE

**Name: Eugene Fahey
Title: General Manager
Phone: (831) 385-7942**

FACILITY CONTACT PERSON:

**Name: Maria Barroso
Title: EHS Specialist II
Phone: (408) 385-7943**

ALTERNATE RESPONSIBLE OFFICIAL

**Name: Maria Barroso/ Lance Null
Title: EHS Specialist II/Plant Engineer
Phone: (408) 385-7943/(408) 337-3430**

IX. Title IV Acid Rain Permit

ACID RAIN PERMIT CONTENTS

- 1) Statement of Basis
- 2) SO₂ 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	2012	2013	2014	2014	2016
	SO₂ allowances under Table 2 of 40 CFR Part 73	None	None	None	None	None
S-3, Turbine	NO_x Limit	This unit is not subject to the NO_x requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.				

IX. Title IV Acid Rain Permit

	Year	2012	2013	2014	2015	2016
	SO₂ allowances under Table 2 of 40 CFR Part 73	None	None	None	None	None
S-4, Turbine	NO_x Limit	This unit is not subject to the NO_x requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.				

	Year	2012	2013	2014	2015	2016
	SO₂ allowances under Table 2 of 40 CFR Part 73	None	None	None	None	None
S-5, Turbine	NO_x Limit	This unit is not subject to the NO_x requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.				

	Year	2012	2013	2014	2015	2016
	SO₂ allowances under Table 2 of 40 CFR Part 73	None	None	None	None	None
S-100, Turbine	NO_x Limit	This unit is not subject to the NO_x requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.				

3) COMMENTS, NOTES AND JUSTIFICATIONS

None

4) PERMIT APPLICATION

Attached

IX. Title IV Acid Rain Permit



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, State, and plant (ORIS) code.

Calpine Gilroy Cogen, LP Facility (Source) Name	CA State	10034 Plant Code
--	-------------	---------------------

STEP 2

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

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

EPA Form 7610-16 (Revised 12-2009)

IX. Title IV Acid Rain Permit

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

Acid Rain - Page 2

STEP 3

Read the standard requirements.

Permit 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 72.6(a)(3).

IX. Title IV Acid Rain Permit

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;

IX. Title IV Acid Rain Permit

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

IX. Title IV Acid Rain Permit

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

Acid Rain - Page 5

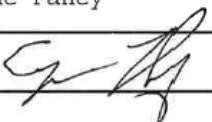
Effect on Other Authorities, Cont'd.

- STEP 3, Cont'd.** to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (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

IX. Title IV Acid Rain Permit

Gilroy Energy Center, LLC
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 72.6(a)(3).

IX. Title IV Acid Rain Permit

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;

IX. Title IV Acid Rain Permit

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) 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

IX. Title IV Acid Rain Permit

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

Acid Rain - Page 5

STEP 3, Cont'd.

Effect on Other Authorities, Cont'd.

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

(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;

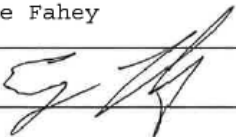
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

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

STEP 4
Read the
certification
statement,
sign, and date.

Certification

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.

Name	Eugene Fahey
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.

B. SUBSUMED REQUIREMENTS

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

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 the Act.

XI. Glossary

SO₂

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

<u>Date</u>	<u>Action</u>	<u>Details</u>
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	Minor revision (Application 22302)	Revised permit conditions 2780, 21961 for dry Low NO _x combustor installation on S-100.
April 18, 2012	Renewal Issuance (Application 22569)	
May 3, 2012	Administrative Amendment (Application 22569)	Change Administrative error on Alternate Responsible Official to Mr. Lance Null and Ms. Maria Barroso.

November 5, 2013	Administrative (Application 25150)	Added condition 25512 to Table VII-C for 2 – Auxiliary Boilers
------------------	---------------------------------------	---