

Bay Area Air Quality Management District

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

Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:

Mariposa Energy, LLC
Facility # B9730

Facility Address:

4887 Bruns Road
Byron, CA 94514

Mailing Address:

333 South Grand Avenue, Suite 1570
Los Angeles, CA 90071

Responsible Official

Mike Kromer, Plant Manager
925-337-3859

Facility Contact

Gary Normoyle, Plant Engineer
213-620-7657

Type of Facility: Generation of Electricity

Primary SIC: 4911

BAAQMD Permit Division Contact:

Madhav Patil, Air Quality Engineer

Product: Electricity

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

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

- BAAQMD Regulation 1 - General Provisions and Definitions
(as amended by the District Board on 5/4/11);
- 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 4/18/12);
- 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 6/15/05);
- SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration (PSD)
(as approved by EPA through 1/26/99);
- BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on 12/19/12);
- SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 1/26/99); and
- BAAQMD Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants
(as amended by the District Board on 1/6/10);
- BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review
(as amended by the District Board on 4/16/03); and
- SIP Regulation 2, Rule 6 – Permits, Major Facility Review
(as approved by EPA through 6/23/95).

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

1. This Major Facility Review Permit will be issued on [Date], and expires on [Date]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than [Date] and no earlier than [Date]. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after [Date].** If the permit renewal has not been issued by [date], 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. (BAAQMD Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (BAAQMD 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. (BAAQMD 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 re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (BAAQMD 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. (BAAQMD 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. (BAAQMD Regulation 1-441, BAAQMD Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
8. Any records required to be maintained pursuant to this permit, which the permittee considers to contain proprietary or trade secret information, shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (BAAQMD Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (BAAQMD Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)

I. Standard Conditions

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. (BAAQMD Regulation 2-6-307)

C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (BAAQMD Regulation 2-6-402 & 409.13, BAAQMD 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 that is subject to this permit to the APCO and/or to his or her designee. (BAAQMD Regulation 1-440, BAAQMD 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. (BAAQMD Regulation 1-441, BAAQMD 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. (BAAQMD 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 reports shall be for the following periods: June 1st through November 30th and December 1st through May 31st, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

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

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

I. Standard Conditions

G. Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be June 1st through May 31st. The certification shall be submitted by June 1st of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

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

(MOP Volume II, Part 3, §4.5 and 4.15)

H. Emergency Provisions

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by BAAQMD Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in BAAQMD Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with BAAQMD 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. (BAAQMD Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

I. Standard Conditions

J. Miscellaneous Conditions

The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Any exceedance of the maximum allowable capacity for any source is a violation of BAAQMD Regulation 2, Rule 1, Section 301. (BAAQMD Regulation 2-1-301)

K. Accidental Release

Not Applicable

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

1. Every year starting January 30, 2012, the permit holder shall hold one sulfur dioxide allowance on March 1 (February 29th during leap year) 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. (BAAQMD Regulation 2-7, Acid Rain)
3. A written Quality Assurance program must be established in accordance with 40 CFR Part 75, Appendix B for NO_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. (BAAQMD Regulation 2-7, Acid Rain)
4. The permit holder shall monitor SO₂ emissions in accordance with 40 CFR Part 72 and 75. (BAAQMD Regulation 2-7, Acid Rain)
5. The permit holder shall submit quarterly Electronic Data Reports (EDRs) to EPA for S-1, S-2, S-3, and S-4, Turbines. These reports must be submitted within 30 days following the end of each calendar quarter and shall include all information required in § 75.64. (40 CFR Part 75)

II. EQUIPMENT

Table II A - Permitted Sources

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I. J. and BAAQMD Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
1	Gas Turbine Generator, Natural Gas with high efficiency inlet air filtration 50 MW (nominal)	General Electric	GE LM 6000 PC-Sprint simple-cycle	500 MMBtu/hour (HHV)
2	Gas Turbine Generator, Natural Gas with high efficiency inlet air filtration 50 MW (nominal)	General Electric	LM6000PC Sprint simple-cycle	500 MMBtu/hour (HHV)
3	Gas Turbine Generator, Natural Gas with high efficiency inlet air filtration 50 MW (nominal)	General Electric	LM6000PC Sprint simple-cycle	500 MMBtu/hour (HHV)
4	Gas Turbine Generator, Natural Gas with high efficiency inlet air filtration 50 MW (nominal)	General Electric	LM6000PC Sprint simple-cycle	500 MMBtu/hour (HHV)
6	Diesel Firewater Pump	John Deere	JU6H- UFADM8	175 BHP

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
1	Oxidation catalyst	1	BAAQMD Condition #24955 Part 17d & 17f	None	CO ≤ 2.0 ppm POC ≤ 0.61 lbs/hr
2	Selective Catalytic Reduction System	1	BAAQMD Condition #24955 Part 17b	None	NOx ≤ 2.5 ppm
3	Oxidation catalyst	2	BAAQMD Condition #24955 Part 17d & 17f	None	CO ≤ 2.0 ppm POC ≤ 0.61 lbs/hr

II Equipment

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
4	Selective Catalytic Reduction System	2	BAAQMD Condition #24955 Part 17b	None	NO _x ≤ 2.5 ppm
5	Oxidation catalyst	3	BAAQMD Condition #24955 Part 17d & 17f	None	CO ≤ 2.0 ppm POC ≤ 0.61 lbs/hr
6	Selective Catalytic Reduction System	3	BAAQMD Condition #24955 Part 17b	None	NO _x ≤ 2.5 ppm
7	Oxidation catalyst	4	BAAQMD Condition #24955 Part 17d & 17f	None	CO ≤ 2.0 ppm POC ≤ 0.61 lbs/hr
8	Selective Catalytic Reduction System	4	BAAQMD Condition #24955 Part 17b	None	NO _x ≤ 2.5 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.

Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered significant sources pursuant to the definition in BAAQMD Rule 2-6-239.

Portable equipment operating in accordance with the ARB portable equipment registration program and temporary equipment may be operated at the facility as long as the source is not significant under Rule 2-6-239. Otherwise significant source would need to be included in the Title V permit.

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

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

The full language of SIP requirements is on EPA Region 9 website:

<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 rules and the versions of the rules in the SIP. All sources must comply with both versions of a rule until US EPA has reviewed and approved the District's revision of the regulation.

III. Generally Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/4/11)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (4/18/12)	N
SIP Regulation 2, Rule 1	General Requirements (1/26/99)	Y
BAAQMD 2-1-429	Federal Emissions Statement (12/21/04)	N
SIP Regulation 2-1-429	Federal Emissions Statement (4/3/95)	Y
BAAQMD Regulation 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 (12/19/12)	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 (1/6/10)	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 (6/19/13)	N
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y
BAAQMD Regulation 5	Open Burning (6/19/13))	N
SIP Regulation 5	Open Burning (9/4/98)	Y
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	Odorous 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 (7/1/09)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings 1/2/04	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 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)	N
SIP Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N
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 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	N
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (6/8/99)	Y
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

III. Generally Applicable Requirements

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
California Health and Safety Code Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater	N
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (7/20/04)	Y
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (4/13/05)	Y
Subpart F, 40 CFR 82.156	Recycling and Emissions Reductions – Required Practices	Y
Subpart F, 40 CFR 82.161	Recycling and Emissions Reductions – Technician Certification	Y
Subpart F, 40 CFR 82.166	Recycling and Emissions Reductions – Reporting and Recordkeeping Requirements	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 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 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 on the EPA Region 9 website:

<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-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (5/4/11)		
1-107	Combination of Emissions	Y	
1-520	Continuous Emission Monitoring	Y	
1-520.8	Monitors required per Reg. 2-1-403	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-522.1	Approval of plans and specifications for monitoring selection and placement	Y	
1-522.2	Installation scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	Reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
1-522.6	CEM accuracy requirements	Y	
1-522.7	Emission limit exceedance reporting requirements	N	
1-522.8	Monitoring data submittal requirements	Y	
1-522.9	Recordkeeping requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Parametric monitor periods of in operation	Y	
1-523.2	Limits on periods of in operation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records Maintenance Period	Y	
1-523.5	Maintenance and Calibration	N	
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	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
BAAQMD Regulation 2, Rule 1	Regulation 2, Rule 1 - Permits, General Requirements (4/18/12)		
2-1-501	Continuous Emission Monitors	Y	
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (12/05/07)		
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 (09/04/98)		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	

IV. Source-Specific Applicable Requirements

**Table IV - A
 Source-specific Applicable Requirements
 S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
BAAQMD Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/06/06)		
9-9-113	Exemption – Inspection/Maintenance	N	
9-9-114	Exemption – Start-Up/Shutdown	N	
9-9-301	Emission Limits, General	N	
9-9-301.1.3	Emission Limits- Turbines Rated ≥ 10 MW w/SCR	N	
9-9-301.2	Emission Limits - Turbine heat input rated > 250 – 500 MM Btu/hr	N	
9-9-401	Certification Efficiency	N	
9-9-501	Monitoring and recordkeeping requirements	N	
9-9-603	Continuous Emission Monitoring	Y	
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	
9-9-501	Monitoring and recordkeeping requirements	Y	
9-9-603	Continuous Emission Monitoring	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 – General Provision (1/28/09)	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.7	Notification and Recordkeeping	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	
40 CFR 60, Subpart KKKK	Standard of Performance for Stationary Combustion Turbines (7/6/06)	Y	
60.4300	What is the purpose of this subpart? Control of emissions from stationary combustion turbines (SCT) that commenced construction, modification, or reconstruction after February 18, 2005	Y	
60.4305	Does this subpart apply to my stationary turbine?	Y	
60.4305(a)	Applicable to SCT with heat input ≥ 10 MMBtu/hr (at turbine only). Emission requirements in subpart also applies to HRSG and duct burner	Y	
60.4305(b)	SCT exempt from Subpart GG and HRSG/duct burner exempt from Subparts Da, Db, and Dc	Y	
60.4315	What pollutants are regulated by this subpart? NOx and SO2	Y	
60.4320	What emission limits must I meet for nitrogen oxides (NOX)?	Y	
60.4320(a)	Comply with Table 1 NOx requirements for new turbine firing natural gas, electric generating turbine > 50 MMBtu/hr and ≤ 850 MMBtu/hr: 25 ppm at 15% O2	Y	
60.4320(h)	30-day rolling average for combined cycle plants	Y	
60.4330	What emission limits must I meet for sulfur dioxide (SO2)?	Y	
60.4330(a)	Turbines located in continental area must comply with (a)(1), (a)(2), or (a)(3)	Y	
60.4330(a)(2)	SO2 emissions to not exceed 0.060 lb/MMBtu	Y	
60.4333	What are my general requirements for complying with this subpart?	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.4333(a)	General Requirements for operation and maintenance	Y	
60.4335	How do I demonstrate compliance for NOx if I use water or steam injection?	Y	
60.4335(b)(1)	NOx and CO2 or O2 CEMs to determine NOx emissions	Y	
60.4345	What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?	Y	
60.4345(a)	NOx CEMs installed and certified pursuant to Performance Specification 2 in appendix B, or appendix A of Part 75. RATA of the CEMs is required.	Y	
60.4345(b)	NOx CEMs operating requirements	Y	
60.4345(c)	Fuel flow meter requirements	Y	
60.4345(d)	Steam flow meter, pressure and temperature device requirements	Y	
60.4345(e)	QA plan for CEMs, flow meters, and pressure and temperature devices	Y	
60.4350	How do I use data from the continuous emission monitoring equipment to identify excess emissions?	Y	
60.4365	How can I be exempted from monitoring the total sulfur content of the fuel?	Y	
60.4365(a)	Exemption from sulfur content monitoring for firing natural gas with less than 20 grains of sulfur per 100 scf	Y	
60.4375	What reports must I submit?	Y	
60.4375(a)	Reporting requirements in accordance with 60.7(c)	Y	
60.4380	How are excess emissions and monitor downtime defined for NOx?	Y	
60.4380(b)	NOx excess emissions and downtime for turbines with CEMs	Y	
60.4395	When must I submit my reports? All reports must be postmarked by the 30th day following the end of each 6-month period	Y	
60.4400	NOx initial and subsequent performance test requirements and methodologies	Y	
60.4405	Alternative NOx initial performance test for turbines with NOx CEMs	Y	
60.4415	SO2 initial and subsequent performance test requirements and methodologies	Y	
60.4420	Definitions	Y	

IV. Source-Specific Applicable Requirements

**Table IV - A
 Source-specific Applicable Requirements
 S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	Permits Regulation (Title IV – Acid Rain Program)	Y	
	Subpart A – Acid Rain Program General Requirements		
72.6	Applicability	Y	
72.6(a)(3)(i)	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 - A
 Source-specific Applicable Requirements
 S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES**

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	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	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.2(c)	The provisions of this part apply to sources subject to a State or federal NO _x mass emission reduction program, to the extent these provisions are adopted as requirements under such a program	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	
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	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.11(d)	Gas-fired and oil-fired units	Y	
75.11(d)(2)	Allows the use of Appendix D Optional SO2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units to monitor SO2 emissions.	Y	
75.12	Specific provisions for monitoring NOx emission rate	Y	
75.12(a)	NOx continuous emission monitor and diluents monitoring requirement	Y	
75.12(c)	NOx mass emission rate determination according to Appendix F	Y	
75.13	Specific provisions for monitoring CO2 emissions	Y	
75.13(b)	Determination of CO2 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	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.32	Determination of monitor data availability for standard missing data procedures	Y	
75.33	Standard missing data procedures for SO ₂ , NO _x , 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	
75.57(d)	NO _x emission record provisions	Y	
75.57(e)	CO ₂ emission record provisions	Y	
75.57(g)	Diluents record provisions	Y	
75.57(h)	Missing data records	Y	
75.58	General recordkeeping provisions for specific situations	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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)	Accepted 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(e)	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	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.66	Petitions to the administrator	Y	
BAAQMD Condition #24955	Conditions to the Permit to Operate for S-1 Combustion Gas Turbine		
Equipment Description	Equipment Description	Y	
Definitions	Definitions	Y	
Part 1	Emissions Minimization during commissioning period (BACT, Regulation 2-2)	Y	
Part 2	Tuning to minimize emissions (BACT, Regulation 2-2)	Y	
Part 3	Installation, and Operation of SCR and Oxidation Catalyst (BACT, Regulation 2-2)	Y	
Part 4	Submittal of Commissioning Plan (BACT, Regulation 2-2)	Y	
Part 5	Continuous Emission Monitors and Recorders (9-9-501, BACT, Regulation 2-2)	Y	
Part 6	Monitors Prior to first firing (9-9-501, BACT, Regulation 2-2)	Y	
Part 7	Compliance with NOx and CO Emission Limits (BACT, Regulation 2-2)	Y	
Part 8	Mass Emission Rates (Regulation 2-2)	Y	
Part 9	Emission Limits (BACT, Regulation 2-2)	Y	
Part 10	Source Test for NOx, CO, and POC (BACT for NOx and CO, Offsets, Regulation 2-2)	Y	
Part 11	Emission Limits for Sulfur (BACT for SO ₂ , PM ₁₀)	Y	
Part 12	Hourly Firing Rate (Regulation 2-2)	Y	
Part 13	Daily Firing Rate (Cumulative Increase for PM10, Regulation 2-2)	Y	
Part 14	Yearly Firing Rate (Offsets, Regulation 2-2)	Y	
Part 15 a	Hourly Operational Limits (Regulation 2-2)	Y	
Part 15 b	Yearly Operational Limits (Offsets, Cumulative Increase)	Y	
Part 16	Abatement (BACT for NOx, POC, CO)	Y	
Part 17 (a)	NOx Emission Limits (BACT, Regulation 2-5, Regulation 2-2)	Y	
Part 17 (b)	NOx Emission Limits (BACT, Regulation 2-5, Regulation 2-2)	Y	
Part 17 (c)	CO Emission Limits (BACT, Regulation 2-5, Regulation 2-2)	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S-1, S-2, S-3 & S-4 COMBUSTION GAS TURBINES

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 17 (d)	CO Emission Limits (BACT, Regulation 2-5, Regulation 2-2)	Y	
Part 17 (e)	NH3 Emission Limits (BACT, Regulation 2-5, Regulation 2-2)	N	
Part 17 (f)	POC Emission Limits (BACT, Regulation 2-5, Regulation 2-2)	Y	
Part 17 (g)	SO2 Emission Limits (BACT, Regulation 2-5, Regulation 2-2)	Y	
Part 18	Mass Emission Limits for NOx, CO and POC during Turbine Startup or Shutdown (BACT)	Y	
Part 19	Combined Mass Emission Limits (Cumulative Increase)	Y	
Part 20	Combined Mass Emission and Malfunction Limits (Offsets, Cumulative Increase)	Y	
Part 21	Toxic Limits (Regulation 2-5)	N	
Part 22	Continuous Emission Monitoring (BACT, Offsets, NSPS, Cumulative increase)	Y	
Part 23	Emissions Records for POC, PM10, and SO2 (Offsets, Cumulative Increase)	Y	
Part 24	Toxic Records (Regulation 2-5)	N	
Part 25	Source Testing for Ammonia (NH ₃) (Regulation 2-5)	N	
Part 26	Source Testing for NOx, CO, POC, and SO ₂ (BACT, Offsets)	Y	
Part 27	Source Test Notification (BACT and Regulation 2-2)	Y	
Part 28	Source Testing for Toxics (Regulation 2-5)	N	
Part 29	Source Testing for Sulfuric Acid (Regulation 2-2)	Y	
Part 30	Source Testing for SO ₂ , SO ₃ , and H ₂ SO ₄ (Regulation 2-2)	Y	
Part 31	Sulfuric Acid Limits (Regulation 2-2)	Y	
Part 32	Stack Height (Regulation 2-5)	Y	
Part 33	Reporting (Manual of Procedure, Regulation 2-1)	Y	
Part 34	Maintaining Records (Regulation 2-1, Regulation 2-6)	Y	
Part 35	Violation Notification (Manual of Procedure, Regulation 2-1)	Y	
Part 36	Source Testing Ports (Manual of Procedure, Regulation 1-1)	Y	
Part 37	Requirements for Continuous Emission Monitoring, Sampling Ports, Platforms, and Source Test (Regulation 1-1)	Y	
Part 38	SO ₂ Allowances (Regulation 2-7)	Y	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-specific Applicable Requirements
S-6 DIESEL FIREWATER PUMP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6 Rule 1	Particulate Matter General requirements (12/05/07)		
6-1-302	Ringelmann No. 2 Limitation	N	
6-1-305	Visible Particulates	N	
6-1-310	Particulate Weight Limitation	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	Particulate Matter and Visible Emissions (09/04/98)		
6-302	Ringelmann Number 2 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	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9, Rule 8	Inorganic Gaseous Pollutants (7/25/07)		
9-8-110.5	Limited Exemption Emergency Standby Engines	N	
9-8-330	Emergency Standby Engines, Hours of Operation	N	
9-8-330.1	Unlimited hours for emergency use	N	
9-8-330.3	50 hours for reliability and maintenance	N	
9-8-502	Recordkeeping	N	
9-8-502.1	Monthly records of usage	N	
9-8-530	Emergency standby engines, monitoring and recordkeeping	N	
40 CFR 60 Subpart A	Standards of Performance for New Stationary Sources – General Provisions (1/28/09)	Y	
60.7	Notification and Recordkeeping	Y	
60.8	Performance Tests	Y	
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	

IV. Source-Specific Applicable Requirements

**Table IV – B
 Source-specific Applicable Requirements
 S-6 DIESEL FIREWATER PUMP**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
40 CFR Part 60 Subpart III	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Y	
60.4200	Am I subject to this subpart?	Y	
60.4200(a)	Applicability to certified fire pump engines manufactured after July 1, 2006.	Y	
60.4205	What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?	Y	
60.4205(c)	Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.	Y	
60.4207	What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?	Y	
60.4207(b)	Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.	Y	
60.4211	What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?	Y	
60.4211(a)	If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section: (63) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer’s emission-related written instructions; (2) Change only those emission-related settings that are permitted by the manufacturer; and (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.	Y	

IV. Source-Specific Applicable Requirements

**Table IV – B
 Source-specific Applicable Requirements
 S-6 DIESEL FIREWATER PUMP**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.4211(c)	If you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205c, you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer’s emission-related specifications, except as permitted in paragraph (g) of this section.	Y	
60.4211(f)	Maintenance and readiness testing limited to 100 hours/year unless owner/operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours/year.	Y	
60.4214	What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?	Y	
40 CFR Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)		
63.6585	Applicability	Y	
63.6585(a)	Applicable to stationary RICE	Y	
63.6585(c)	Applicable to area sources of HAPs	Y	
63.6590 (c) (1)	New or reconstructed stationary RICE located at an area source.	Y	
CCR, Title 17, Section 93115	ATCM for Stationary Compression Ignition Engines	N	
93115.5 (b)	Fuel Requirements	N	
93115.6	ATCM for Stationary CI Engines – Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards	N	
93115.6(b)	In-Use Emergency Standby Diesel-Fueled CI Engine (> 50 bhp) Operating Requirements and Emission Standards	N	
93115.10	Recordkeeping, Reporting and Monitoring Requirements	N	
93115.10(a)	Reporting	N	
93115.10(c)	Demonstration of Compliance with Emission Limits	N	
93115.10(e)(1)	Monitoring Equipment	N	
93115.10(g)	Reporting Requirements for Emergency Standby Engines	N	

IV. Source-Specific Applicable Requirements

**Table IV – B
 Source-specific Applicable Requirements
 S-6 DIESEL FIREWATER PUMP**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
93115.11	ATCM for Stationary CI Engines – Compliance Schedule for Owners or Operators of Three or Fewer Engines (>50 bhp) Located within a District	N	
93115.15	Severability	N	
BAAQMD Condition #22850	Conditions to the Permit to Operate for S-6 Diesel Firewater Pump		
Part 1	Duration for reliability-related testing [Basis: "Stationary Diesel Engine ATCM" section 93115]	N	
Part 2	Mitigate emergency conditions [Basis: "Stationary Diesel Engine ATCM" section 93115]	N	
Part 3	Engine Run-time totalizing meter [Basis: "Stationary Diesel Engine ATCM" section 93115]	N	
Part 4	Record keeping (Cumulative Increase)	N	
Part 5	School boundaries. [Basis: "Stationary Diesel Engine ATCM" section 93115]	N	

V. SCHEDULE OF COMPLIANCE

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

VI. PERMIT CONDITIONS

The District is proposing the following permit conditions to ensure that the project complies with all applicable District, state, and federal Regulations. The proposed conditions would limit operational parameters such as fuel use, stack gas emission concentrations, and mass emission rates. The permit conditions specify abatement device operation and performance levels. To aid enforcement efforts, conditions specifying emission monitoring, source testing, and record keeping requirements are included. Furthermore, pollutant mass emission limits (in units of lb/hr) will insure that daily and annual emission rate limitations are not exceeded.

To provide maximum operational flexibility, no limitations are being proposed on the type or quantity of gas turbine start-ups or shutdowns. Instead, the facility would be required to comply with daily and annual (consecutive twelve-month) mass emission limits at all times. Compliance with CO and NO_x limitations would be verified by continuous emission monitors (CEMs) that will be in operation during all turbine operating modes, including start-up, shutdown, commissioning, and transient conditions. Compliance with POC, SO₂, and PM₁₀ mass emission limits would be verified by annual source testing.

In addition to permit conditions that apply to steady-state operation of each gas turbine power train, the District is proposing conditions that govern equipment operation during the initial commissioning period when the gas turbine power trains will operate without their SCR systems and/or oxidation catalysts in place. Commissioning activities include, but are not limited to, the testing of the gas turbines, and adjustment of control systems. Parts 1 through 10 of the proposed permit conditions for the simple-cycle gas turbines apply to this commissioning period and are intended to minimize emissions during the commissioning period.

Following are the proposed Mariposa Energy Project combustion equipment and the abatement devices regulated by the District.

Condition #24955: Mariposa Energy Project Combustion Equipment and Abatement Devices

- S-1 Combustion Turbine Generator (CTG) #1, GE LM 6000 PC-Sprint, Natural Gas Fired, with high efficiency inlet air filtration, 50 MW (nominal), 500 MMbtu/hr maximum rated capacity (HHV); abated by A-1 Oxidation Catalyst and A-2 Selective Catalytic Reduction System (SCR).
- S-2 Combustion Turbine Generator (CTG) #2, GE LM 6000 PC-Sprint, Natural Gas Fired, with high efficiency inlet air filtration, 50 MW (nominal), 500 MMbtu/hr maximum rated capacity (HHV); abated by A-3 Oxidation Catalyst and A-4 Selective Catalytic Reduction System (SCR).

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- S-3 Combustion Turbine Generator (CTG) #3, GE LM 6000 PC-Sprint, Natural Gas Fired, with high efficiency inlet air filtration, 50 MW (nominal), 500 MMbtu/hr maximum rated capacity (HHV); abated by A-5 Oxidation Catalyst and A-6 Selective Catalytic Reduction System (SCR).
- S-4 Combustion Turbine Generator (CTG) #4, GE LM 6000 PC-Sprint, Natural Gas Fired, with high efficiency inlet air filtration, 50 MW (nominal), 500 MMbtu/hr maximum rated capacity (HHV); abated by A-7 Oxidation Catalyst and A-8 Selective Catalytic Reduction System (SCR).
- S-6 Diesel Fire Pump: Make: John Deere; Model: JU6H-M8; Model Year: TBD (2009 or later); Rated bhp: 175

Definitions:

- Hour: Any continuous 60-minute period
- 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
- Rolling 3-hour period: Any consecutive three hour period, not including start-up or shutdown periods
- Rolling 3-hour period for CO: Any consecutive three-hour period, not including commissioning, start-up or shutdown periods. Rolling 3-hour periods shall be calculated for normal steady state operation. The minutes shall be summed across normal operating periods and days until 180 minutes have accrued. Compliance with the CO limit shall be based on this 3-hour period. After each 3-hour period has elapsed, a new 3-hour period begins every 60 minutes after the beginning of the previous 3-hour period.
- 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 minutes
- MMbtu: million British thermal units
- Gas Turbine Start-up Mode: The lesser of the first 30 minutes of continuous fuel flow to the Turbine after fuel flow is initiated or the period of time from Gas Turbine fuel flow initiation until the Gas Turbine achieves two consecutive CEM data points in compliance with the emission concentration limits of conditions 17(b) and 17(d).
- Gas Turbine Shutdown Mode: The lesser of the 15 minute period immediately prior to the termination of fuel flow to the Gas Turbine or the period of time from non-

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compliance with any requirement listed in Conditions 17(b) and 17(d) until termination of fuel flow to the Gas Turbine

Gas Turbine Combustor

Specified PAHs: The polycyclic aromatic hydrocarbons listed below shall be considered to be Specified PAHs for these permit conditions. Any emission limits for Specified PAHs refer to the sum of the emissions for all six of the following compounds

Benzo[a]anthracene
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Benzo[a]pyrene
Dibenzo[a,h]anthracene
Indeno[1,2,3-cd]pyrene

Corrected
Concentration:

The concentration of any pollutant (generally NO_x, CO, or NH₃) corrected to a standard stack gas oxygen concentration. For emission points P-1 (exhaust of S-1 Gas Turbine), P-2 (exhaust of S-2 Gas Turbine) P-3 (exhaust of S-3 Gas Turbine), P-4 (exhaust of S-4 Gas Turbine), the standard stack gas oxygen concentration is 15% O₂ by volume on a dry basis

Commissioning
Activities:

All testing, adjustment, initial tuning, and calibration activities recommended by the equipment manufacturers and the MEP construction contractor to insure safe and reliable steady-state operation of the gas turbines, and associated electrical delivery systems during the commissioning period

Commissioning
Period:

For each turbine, the period shall commence when all mechanical, electrical, and control systems are installed and individual system start-up has been completed, or when the gas turbine is first fired, whichever occurs first. The period shall terminate when the plant has completed performance testing for the turbine, the turbine is available for commercial operation, and the owner/operator has initiated sales to the power exchange from that turbine.

Precursor Organic
Compounds (POCs):

Any compound of carbon, excluding methane, ethane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate

CEC CPM:

California Energy Commission Compliance Program Manager

MEP:

Mariposa Energy Project

Total Particulate
Matter:

The sum of all filterable and all condensable particulate matter.

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Applicability:

Parts 1 through 10 of this condition shall only apply during the commissioning period as defined above. Unless otherwise indicated, Parts 11 through 38 of this condition shall apply after the commissioning period has ended.

1. The owner/operator of the MEP shall minimize emissions of carbon monoxide and nitrogen oxides from S-1, S-2, S-3 and S-4 Gas Turbines to the maximum extent possible during the commissioning period. (Basis: BACT, Regulation 2, Rule 2, Section 409)
2. At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the owner/operator shall tune the S-1, S-2, S-3 and S-4 Gas Turbines combustors to minimize the emissions of carbon monoxide and nitrogen oxides. (Basis: BACT, Regulation 2, Rule 2, Section 409)
3. At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the owner/operator shall install, adjust, and operate the A-1, A-3, A-5 and A-7 Oxidation Catalysts and A-2, A-4, A-6 and A-8 SCR Systems to minimize the emissions of carbon monoxide and nitrogen oxides from S-1, S-2, S-3, and S-4 Gas Turbines. (Basis: BACT, Regulation 2, Rule 2, Section 409)
4. The owner/operator of the MEP shall submit a plan to the District Engineering Division and the CEC CPM at least four weeks prior to first firing of S-1, S-2, S-3, and S-4 Gas Turbines describing the procedures to be followed during the commissioning of the gas turbines. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the initial tuning of the combustors, the installation and operation of the required emission control systems, the installation, calibration, and testing of the CO and NOx continuous emission monitors, and any activities requiring the firing of the Gas Turbines (S-1, S-2, S-3 & S-4) without abatement by their respective oxidation catalysts and/or SCR Systems. The owner/operator shall not fire any of the Gas Turbines (S-1, S-2, S-3 or S-4) sooner than 28 days after the District receives the commissioning plan. (Basis: Regulation 2, Rule 2, Section 419)
5. During the commissioning period, the owner/operator of the MEP shall demonstrate compliance with Parts 7, 8, 9, and 10 through the use of properly operated and maintained continuous emission monitors and data recorders for the following parameters and emission concentrations:
 - firing hours
 - fuel flow rates

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stack gas nitrogen oxide emission concentrations,
stack gas carbon monoxide emission concentrations
stack gas oxygen concentrations.

The monitored parameters shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation) for the Gas Turbines (S-1, S-2, S-3, and S-4). The owner/operator shall use District-approved methods to calculate heat input rates, nitrogen dioxide mass emission rates, carbon monoxide mass emission rates, and NO_x and CO emission concentrations, summarized for each clock hour and each calendar day. The owner/operator shall retain records on site for at least 5 years from the date of entry and make such records available to District personnel upon request. (Basis: Regulation 2, Rule 2, Section 419)

6. The owner/operator shall install, calibrate, and operate the District-approved continuous monitors specified in Part 5 prior to first firing of the Gas Turbines (S-1, S-2, S-3 and S-4). After first firing of the turbines, the owner/operator shall adjust the detection range of these continuous emission monitors as necessary to accurately measure the resulting range of CO and NO_x emission concentrations. The instruments shall operate at all times of operation of S-1, S-2, S-3, and S-4 including start-up, shutdown, upset, and malfunction, except as allowed by BAAQMD Regulation 1-522, BAAQMD Manual of Procedures, Volume V. If necessary to comply with this requirement, the owner/operator shall install dual-span monitors. The type, specifications, and location of these monitors shall be subject to District review and approval. (Basis: Regulation 2, Rule 2, Section 419)
7. The owner/operator shall not fire S-1, S-2, S-3, or S-4 Gas Turbine without abatement of nitrogen oxide emissions by the corresponding SCR System A-2, A-4, A-6, or A-8 and/or abatement of carbon monoxide emissions by the corresponding Oxidation Catalyst A-1, A-3, A-5, or A-7 for more than 200 hours each during the commissioning period. Such operation of any Gas Turbine (S-1, S-2, S-3, S-4) without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and/or oxidation catalyst in place. Upon completion of these activities, the owner/operator shall provide written notice to the District Engineering and Enforcement Divisions and the unused balance of the 200 firing hours for each turbine without abatement shall expire. (Basis: BACT, Regulation 2, Rule 2, Section 409)
8. The total mass emissions of nitrogen oxides, carbon monoxide, precursor organic compounds, PM₁₀, and sulfur dioxide that are emitted by the Gas Turbines (S-1, S-2, S-3, and S-4) during the commissioning period shall accrue towards the consecutive twelve-month emission limitations specified in Part 20. (Basis: Regulation 2, Rule 2, Section 409)
9. The owner/ operator shall not operate the Gas Turbines (S-1, S-2, S-3, and S-4) in a manner such that the combined pollutant emissions from the gas turbines will exceed the

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following limits during the commissioning period. These emission limits shall include emissions resulting from the start-up and shutdown of the Gas Turbines (S-1, S-2, S-3, S-4). In addition, commissioning activities will be conducted on no more than one turbine/day. (Basis: BACT, Regulation 2, Rule 2, Section 409)

NOx (as NO ₂):	16.3 tons per year
CO:	8.7 tons per year
POC (as CH ₄):	1.0 ton per year
PM ₁₀ :	1.0 ton per year
SO ₂ :	0.54 ton per year

- 9a. The owner/ operator shall not operate the Gas Turbines (S-1, S-2, S-3, and S-4) in a manner such that the pollutant emissions from each gas turbine will exceed the following limits during the commissioning period. These emission limits shall include emissions resulting from the start-up and shutdown of the Gas Turbines (S-1, S-2, S-3, S-4). In addition, commissioning activities will be conducted on no more than one turbine/day. (Basis: BACT, Regulation 2, Rule 2, Section 409)

NOx (as NO ₂):	408 pounds per calendar day
	51 pounds per hour
CO:	360 pounds per calendar day
	45 pounds per hour
POC (as CH ₄):	36 pounds per calendar day
PM ₁₀ :	20 pounds per calendar day
SO ₂ :	10.8 pounds per calendar day

10. Within 90 days after start-up of each turbine, the owner/operator shall conduct District and CEC approved source tests on that turbine to determine compliance with the emission limitations specified in Part 17 on that turbine. The source tests shall determine NO_x, CO, and POC emissions during start-up and shutdown of the gas turbines. The POC emissions shall be analyzed for methane and ethane to account for the presence of unburned natural gas. The source test shall include a minimum of three start-up and three shutdown periods. Thirty working days before the execution of the source tests, the owner/operator shall submit to the District and the CEC Compliance Program Manager (CPM) a detailed source test plan designed to satisfy the requirements of this Part. The District and the CEC CPM will notify the owner/operator of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved. The owner/operator shall incorporate the District and CEC CPM comments into the test plan. The owner/operator shall notify the District and the CEC CPM within seven (7) working days prior to the planned source testing date. The owner/operator shall submit the source test results for each turbine to the District and the CEC CPM within 60 days of the source testing date of that turbine. (Basis: Regulation 2, Rule 2, Section 419)

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Conditions #24955 for the GE LM 6000 PC Sprint Simple-Cycle Gas Turbines (S-1, S-2, S-3, and S-4)

11. The owner/operator shall fire the Gas Turbines (S-1, S-2, S-3, and S-4) exclusively on PUC-regulated natural gas with a maximum sulfur content of 1 grain per 100 standard cubic feet. To demonstrate compliance with this limit, the operator of S-1, S-2, S-3 and S-4 shall sample and analyze the gas from each supply source at least monthly to determine the sulfur content of the gas. PG&E monthly sulfur data may be used provided that such data can be demonstrated to be representative of the gas delivered to the MEP. (Basis: BACT for SO₂ and PM₁₀)
12. The owner/operator shall not operate the units such that the heat input rate to each Gas Turbine (S-1, S-2, S-3, and S-4) exceeds 500 MMbtu (HHV) per hour. (Basis: 2-2-409)
13. The owner/operator shall not operate the units such that the heat input rate to each Gas Turbine (S-1, S-2, S-3, and S-4) exceeds 12,000 MMbtu (HHV) per day. (Basis: 2-2-409, Cumulative Increase for PM₁₀)
14. The owner/operator shall not operate the units such that the combined cumulative heat input rate for the Gas Turbines (S-1, S-2, S-3, and S-4) exceeds 8,128,900 MMbtu (HHV) per year. (Basis: 2-2-409, Offsets)
- 15a. The owner operator shall not operate any turbine S-1, S-2, S-3, or S-4 such that the hours of operation for any of the four units exceeds 5,200 hours per year. (Basis: 2-2-409)
- 15b. The owner operator shall not operate the turbines S-1, S-2, S-3, or S-4 such that the hours of operation for the four units combined exceeds 16,900 hours per year. (Basis: Offsets, Cumulative Increase)
16. The owner/operator shall ensure that each Gas Turbine (S-1, S-2, S-3, S-4) is abated by the properly operated and properly maintained Selective Catalytic Reduction (SCR) System A-2, A-4, A-6 or A-8 and Oxidation Catalyst System A-1, A-3, A-5, or A-7 whenever fuel is combusted at those sources and the corresponding SCR catalyst bed (A-2, A-4, A-6 or A-8) has reached minimum operating temperature. (Basis: BACT for NO_x, POC and CO)
17. The owner/operator shall ensure that the Gas Turbines (S-1, S-2, S-3, S-4) comply with requirements (a) through (i). Requirements (a) through (f) do not apply during a gas turbine start-up, and shutdown. (Basis: BACT and Regulation 2, Rule 5)
 - a) Nitrogen oxide mass emissions (calculated as NO₂) at each exhaust point P-1, P-2, P-3, and P-4 (exhaust point for S-1, S-2, S-3 and S-4 Gas Turbine after abatement by

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- A-2, A-4, A-6 and A-8 SCR System) shall not exceed 4.4 pounds per hour. (Basis: BACT for NO_x).
- b) The nitrogen oxide emission concentration at each exhaust point P-1, P-2, P-3 and P-4 shall not exceed 2.5 ppmv, on a dry basis, corrected to 15% O₂, averaged over any 1-hour period. (Basis: BACT for NO_x)
 - c) Carbon monoxide mass emissions at each exhaust point P-1, P-2, P-3, and P-4 shall not exceed 2.14 pounds per hour. (Basis: BACT for CO)
 - d) The carbon monoxide emission concentration at each exhaust point P-1, P-2, P-3, and P-4 shall not exceed 2.0 ppmv, on a dry basis, corrected to 15% O₂ averaged over any rolling 3-hour period. (Basis: BACT for CO)
 - e) Ammonia (NH₃) emission concentrations at each exhaust point P-1, P-2, P-3, and P-4 shall not exceed 5 ppmv, on a dry basis, corrected to 15% O₂, averaged over any rolling 3-hour period. This ammonia emission concentration shall be verified by the continuous recording of the ammonia injection rate to each SCR System A-2, A-4, A-6, and A-8. The correlation between the gas turbine heat input rates, A-2, A-4, A-6, and A-8 SCR System ammonia injection rates, and corresponding ammonia emission concentration at emission points P-1, P-2, P-3 and P-4 shall be determined in accordance with Part 25 or a District approved alternative method. (Basis: Regulation 2, Rule 5)
 - f) Precursor organic compound (POC) mass emissions (as CH₄) at each exhaust point P-1, P-2, P-3, and P-4 shall not exceed 0.61 pounds per hour. (Basis: BACT for POC)
 - g) Sulfur dioxide (SO₂) mass emissions at each exhaust point P-1, P-2, P-3, and P-4 shall not exceed 1.35 pounds per hour. (Basis: BACT for SO₂)
 (Basis: Regulation 2, Rule 2, Section 419)

18. The owner/operator shall ensure that the regulated air pollutant mass emission rates from each of the Gas Turbines (S-1, S-2, S-3, and S-4) during a start-up or shutdown does not exceed the limits established below. Startups shall not exceed 30 minutes. Shutdowns shall not exceed 15 minutes. (Basis: BACT Limit for startup and shutdown operation)

TABLE 39. STARTUP AND SHUTDOWN

Pollutant	Maximum Emissions Per Startup (lb/startup)	Maximum Emissions During Hour with Startup and/or Shutdown(lb/hr)	Maximum Emissions Per Shutdown (lb/shutdown)
NO _x (as NO ₂)	14.2	18.5	3.2
CO	14.1	1. 17.3	2.7
POC (as CH ₄)	1.1	1.4	0.12

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19. The owner/operator shall not allow total combined emissions from the Gas Turbines (S-1, S-2, S-3, and S-4), including emissions generated during gas turbine start-ups, and shutdowns to exceed the following limits during any calendar day:
- (a) 1100 pounds of NOx (as NO₂) per day (Basis: Cumulative Increase)
 - (b) 934 pounds of CO per day (Basis: Cumulative Increase)
 - (c) 95 pounds of POC (as CH₄) per day (Basis: Cumulative Increase)
 - (d) 130 pounds of SO₂ per day (Basis: Cumulative Increase)
20. The owner/operator shall not allow cumulative combined emissions from the Gas Turbines (S-1, S-2, S-3, and S-4), including emissions generated during gas turbine start-ups, shutdowns, and malfunctions to exceed the following limits during any consecutive twelve-month period:
- (a) 45.6 tons of NOx (as NO₂) per year (Basis: Offsets)
 - (b) 27.2 tons of CO per year (Basis: Cumulative Increase)
 - (c) 5.6 tons of POC (as CH₄) per year (Basis: Cumulative Increase)
 - (d) 18.6 tons of PM₁₀ per year (Basis: Cumulative Increase)
 - (e) 2.9 tons of SO₂ per year (Basis: Cumulative Increase)

Emissions of PM₁₀ from each gas turbine shall be calculated by multiplying turbine fuel usage times an emission factor determined by source testing of the turbine conducted in accordance with Part 26. The emission factor for each turbine shall be based on the average of the emissions rates observed during the 4 most recent source tests on that turbine (or, prior to the completion of 4 source tests on a turbine, on the average of the emission rates observed during all source tests on the turbine).

21. The owner/operator shall not allow the maximum projected annual toxic air contaminant emissions (per Part 26) from the Gas Turbines (S-1, S-2, S-3, S-4) combined to exceed the following limits:

formaldehyde	3725.26
pounds per year	
benzene	107.94 pounds per year
Specified polycyclic aromatic hydrocarbons (PAHs)	1.063 pounds per year

unless the following requirement is satisfied:

The owner/operator shall perform a health risk assessment to determine the total facility risk using the emission rates determined by source testing and the most current Bay Area Air Quality Management District approved procedures and unit risk factors in effect at the time of the analysis. The owner/operator shall submit the risk analysis to the District and the CEC CPM within 60 days of the source test date. The owner/operator may request that the District and the CEC CPM revise the carcinogenic compound emission

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limits specified above. If the owner/operator demonstrates to the satisfaction of the APCO that these revised emission limits will not result in a significant cancer risk, the District and the CEC CPM may, at their discretion, adjust the carcinogenic compound emission limits listed above. (Basis: Regulation 2, Rule 5)

22. The owner/operator shall demonstrate compliance with Parts 12 through 15, 17(a) through 17(e), 18 (NO_x and CO limits), 19(a), 19(b), 20(a) and 20(b) by using properly operated and maintained continuous monitors (during all hours of operation including gas turbine start-up, and shutdown periods). The owner/operator shall monitor for all of the following parameters:
- (a) Firing Hours and Fuel Flow Rates for each of the following sources: S-1, S-2, S-3, and S-4
 - (b) Oxygen (O₂) concentration, Nitrogen Oxides (NO_x) concentration, and carbon monoxide (CO) concentration at exhaust points P-1, P-2, P-3 and P-4.
 - (c) Ammonia injection rate at A-2, A-4, A-6 and A-8 SCR Systems

The owner/operator shall record all of the above parameters at least every 15 minutes (excluding normal calibration periods) and shall summarize all of the above parameters for each clock hour. For each calendar day, the owner/operator shall calculate and record the total firing hours, the average hourly fuel flow rates, and pollutant emission concentrations.

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

- (d) Heat Input Rate for each of the following sources: S-1, S-2, S-3, and S-4
- (e) Corrected NO_x concentration, NO_x mass emission rate (as NO₂), corrected CO concentration, and CO mass emission rate at each of the following exhaust points: P-1, P-2, P-3 and P-4.

For each source and exhaust point, the owner/operator shall record the parameters specified in Parts 22(d) and 22(e) at least once every 15 minutes (excluding normal calibration periods). As specified below, the owner/operator shall calculate and record the following data:

- (f) total heat input rate for every clock hour and the average hourly heat input rate for every rolling 3-hour period.
- (g) on an hourly basis, the cumulative total heat input rate for each calendar day for the following: each Gas Turbine and for S-1, S-2, S-3 and S-4 combined.
- (h) the average NO_x mass emission rate (as NO₂), CO mass emission rate, and corrected NO_x and CO emission concentrations for every clock hour.
- (i) on an hourly basis, the cumulative total NO_x mass emissions (as NO₂) and the cumulative total CO mass emissions, for each calendar day for the following: each Gas Turbine and for S-1, S-2, S-3 and S-4 combined.

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- (j) For each calendar day, the average hourly heat input rates, corrected NO_x emission concentration, NO_x mass emission rate (as NO₂), corrected CO emission concentration, and CO mass emission rate for each gas turbine.
 - (k) on a monthly basis, the cumulative total NO_x mass emissions (as NO₂) and cumulative total CO mass emissions, for the previous consecutive twelve-month period for sources S-1, S-2, S-3, and S-4 combined. (Basis: 1-520.1, 9-9-501, BACT, Offsets, NSPS, Cumulative Increase)
23. To demonstrate compliance with Parts 17(f), 17(g), , 19(c), 19(d), 20(c), 20(d), 20(e), the owner/operator shall calculate and record on a daily basis, the precursor organic compound (POC) mass emissions, fine particulate matter (PM₁₀) mass emissions (including condensable particulate matter), and sulfur dioxide (SO₂) mass emissions from each power train. The owner/operator shall use the actual heat input rates measured pursuant to Part 22, actual gas turbine start-up times, actual gas turbine shutdown times, and CEC and District-approved emission factors developed pursuant to source testing under Part 26 to calculate these emissions. The owner/operator shall present the calculated emissions in the following format:
- (a) For each calendar day, POC, PM₁₀, and SO₂ emissions, summarized for each power train (gas turbine) and S-1, S-2, S-3, and S-4 combined
 - (b) on a monthly basis, the cumulative total POC, PM₁₀, and SO₂ mass emissions, for each year for S-1, S-2, S-3, and S-4 combined.
(Basis: Offsets, Cumulative Increase)
24. To demonstrate compliance with Part 21, the owner/operator shall calculate and record on an annual basis the maximum projected annual emissions of: formaldehyde, benzene, and specified PAH's. The owner/operator shall calculate the maximum projected annual emissions using the maximum annual heat input rate of 8,128,900 MMBtu/year for S-1, S-2, S-3, and S-4 combined and the highest emission factor (pounds of pollutant per MMBtu of heat input) determined by the most recent of any source test of the S-1, S-2, S-3, or S-4 Gas Turbines. If the highest emission factor for a given pollutant occurs during minimum-load turbine operation, a reduced annual heat input rate may be utilized to calculate the maximum projected annual emissions to reflect the reduced heat input rates during gas turbine start-up and minimum-load operation. The reduced annual heat input rate shall be subject to District review and approval. (Basis: Regulation 2, Rule 5)
25. Within 90 days of start-up of each of the MEP GE LM-6000 PC Sprint units, the owner/operator shall conduct a District-approved source test on exhaust point P-1, P-2, P-3, or P-4 to determine the corrected ammonia (NH₃) emission concentration to determine compliance with Part 17(e). The source test shall determine the correlation between the heat input rates of the gas turbine, A-2, A-4, A-6, or A-8 SCR System ammonia injection rate, and the corresponding NH₃ emission concentration at emission point P-1, P-2, P-3, or P-4. The source test shall be conducted over the expected operating range of the turbine (including, but not limited to, minimum and full load modes) to establish the

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range of ammonia injection rates necessary to achieve NO_x emission reductions while maintaining ammonia slip levels. The owner/operator shall repeat the source testing on an annual basis thereafter. Ongoing compliance with Part 17(e) shall be demonstrated through calculations of corrected ammonia concentrations based upon the source test correlation and continuous records of ammonia injection rate. The owner/operator shall submit the source test results to the District and the CEC CPM within 60 days of conducting the tests. (Basis: Regulation 2, Rule 5)

26. Within 90 days of start-up of each of the MEP GE LM-6000 PC Sprint units and on an annual basis thereafter, the owner/operator shall conduct a District-approved source test on exhaust points P-1, P-2, P-3 and P-4 while each Gas Turbine is operating at maximum load to determine compliance with Parts 17(a), 17(b), 17(c), 17(d), 17(f), 17(g), and to determine a total particulate matter including condensable particulate matter emission factor, and while each Gas Turbine is operating at minimum load to determine compliance with Parts 17(c), and 17(d) and to verify the accuracy of the continuous emission monitors required in Part 22. The owner/operator shall test for (as a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic compound concentration and mass emissions, nitrogen oxide concentration and mass emissions (as NO₂), carbon monoxide concentration and mass emissions, sulfur dioxide concentration and mass emissions, methane, ethane, and total particulate matter emissions including condensable particulate matter. The owner/operator shall submit the source test results to the District and the CEC CPM within 60 days of conducting the tests. The owner/operator may conduct up to four tests per year for total particulate matter including condensable particulate matter. (Basis: BACT, Offsets)
27. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section and the CEC CPM prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements for continuous emission monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section and the CEC CPM in writing of the source test protocols and projected test dates at least 7 days prior to the testing date(s). As indicated above, the owner/operator shall measure the contribution of condensable PM (back half) to any measurement of the total particulate matter or PM₁₀ emissions. However, the owner/operator may propose alternative measuring techniques to measure condensable PM such as the use of a dilution tunnel or other appropriate method used to capture semi-volatile organic compounds. The owner/operator shall submit the source test results to the District and the CEC CPM within 60 days of conducting the tests. (Basis: BACT, Regulation 2, Rule 2, Section 419)
28. Within 90 days of start-up of each of the MEP GE LM-6000 PC Sprint gas turbines and on a biennial basis (once every two years) thereafter, the owner/operator shall conduct a District-approved source test on one of the following exhaust points P-1, P-2, P-3 or P-4 while the Gas Turbine is operating at maximum allowable operating rates to demonstrate

VI. Permit Conditions

compliance with Part 21. The owner/operator shall also test the gas turbine while it is operating at minimum load. If three consecutive biennial source tests demonstrate that the annual emission rates calculated pursuant to Part 24 for any of the compounds listed below are less than the BAAQMD trigger levels, pursuant to Regulation 2, Rule 5, shown, then the owner/operator may discontinue future testing for that pollutant:

Benzene	≤	3.8 pounds/year and 2.9 pounds/hour
Formaldehyde	<	18 pounds/year and 0.12 pounds/hour
Specified PAHs	≤	0.0069 pounds/year

(Basis: Regulation 2, Rule 5)

29. The owner/operator shall calculate the sulfuric acid mist (SAM) emission rate using the total heat input for the sources and the highest results of any source testing conducted pursuant to Part 30. If this SAM mass emission limit of Part 31 is exceeded, the owner/operator must utilize air dispersion modeling to determine the impact (in micrograms/cubic meter) of the sulfuric acid mist emissions pursuant to Regulation 2, Rule 2, Section 306. (Basis: Regulation 2, Rule 2, Section 306)
30. Within 90 days of start-up of each of the MEP GE LM-6000 PC Sprint gas turbines and on an annual basis thereafter, the owner/operator shall conduct a District-approved source test on two of the four exhaust points P-1, P-2, P-3 and P-4 while each gas turbine is operating at maximum heat input rates to demonstrate compliance with the SAM emission rates specified in Part 31. The owner/operator shall test for (as a minimum) SO₂, SO₃, and H₂SO₄. The owner/operator shall submit the source test results to the District and the CEC CPM within 60 days of conducting the tests. (Basis: Regulation 2, Rule 2, Section 306, and Regulation 2, Rule 2, Section 419)
31. The owner/operator shall not allow sulfuric acid emissions (SAM) from stacks P-1, P-2, P-3, P-4 combined to exceed 7 tons in any consecutive 12 month period. (Basis: Regulation 2, Rule 2, Section 306, and Regulation 2, Rule 2, Section 419)
32. The owner/operator shall ensure that the stack heights of emission points P-1, P-2, P-3 and P-4 are each at least 79.5 feet above grade level at the stack base. (Basis: Regulation 2, Rule 5)
33. The owner/operator of the MEP shall submit all reports to the District (including, but not limited to monthly CEM reports, monitor breakdown reports, emission excess reports, equipment breakdown reports, etc.) as required by District Rules or Regulations and in accordance with all procedures and time limits specified in the Rule, Regulation, Manual of Procedures, or Enforcement Division Policies & Procedures Manual. (Basis: Regulation 2, Rule 1, Section 403)

VI. Permit Conditions

34. The owner/operator of the MEP shall maintain all records and reports on site for a minimum of 5 years. These records shall include but are not limited to: continuous monitoring records (firing hours, fuel flows, emission rates, monitor excesses, breakdowns, etc.), source test and analytical records, natural gas sulfur content analysis results, emission calculation records, records of plant upsets and related incidents. The owner/operator shall make all records and reports available to District and the CEC CPM staff upon request. (Basis: Regulation 2, Rule 1, Section 403, Regulation 2, Rule 6, Section 501)
35. The owner/operator of the MEP shall notify the District and the CEC CPM of any violations of these permit conditions. Notification shall be submitted in a timely manner, in accordance with all applicable District Rules, Regulations, and the Manual of Procedures. Notwithstanding the notification and reporting requirements given in any District Rule, Regulation, or the Manual of Procedures, the owner/operator shall submit written notification (facsimile is acceptable) to the Enforcement Division within 96 hours of the violation of any permit condition. (Basis: Regulation 2, Rule 1, Section 403)
36. The owner/operator of MEP shall provide adequate stack sampling ports and platforms to enable the performance of source testing. The location and configuration of the stack sampling ports shall comply with the District Manual of Procedures, Volume IV, Source Test Policy and Procedures, and shall be subject to BAAQMD review and approval, except that the facility shall provide four sampling ports that are at least 6 inches in diameter in the same plane of each gas turbine stack (P-1, P-2, P-3, P-4). (Basis: Regulation 1, Section 501)
37. Within 180 days of the issuance of the Authority to Construct for the MEP, the owner/operator shall contact the BAAQMD Technical Services Division regarding requirements for the continuous emission monitors, sampling ports, platforms, and source tests required by Parts 10, 25, 26, 28 and 30. The owner/operator shall conduct all source testing and monitoring in accordance with the District approved procedures. (Basis: Regulation 1, Section 501)
38. The owner/operator shall ensure that the MEP complies with the requirement to hold SO₂ allowances in 40 CFR 72.9(c)(1) and the continuous emission monitoring requirements of 40 CFR Part 75. (Basis: Regulation 2, Rule 7)

Condition #22850 For S-6, Diesel Fire Pump

1. The owner/operator shall not exceed 50 hours per year per engine for reliability-related testing. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3) or (e)(2)(B)(3)]

VI. Permit Conditions

2. The owner/operator shall operate each emergency standby engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, State or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating while mitigating emergency conditions or while emission testing to show compliance with District, State or Federal emission limits is not limited.

[Basis: “Stationary Diesel Engine ATCM” section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3) or (e)(2)(B)(3)]

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- 3. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained. [Basis: “Stationary Diesel Engine ATCM” section 93115, title 17, CA Code of Regulations, subsection (e)(4)(G)(1)]
- 4. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 36 months from the date of entry (60 months if the facility has been issued a Title V Major Facility Review Permit or a Synthetic Minor Operating Permit). Log entries shall be retained on-site, either at a central location or at the engine’s location, and made immediately available to the District staff upon request.
 - a. Hours of operation for reliability-related activities (maintenance and testing).
 - b. Hours of operation for emission testing to show compliance with emission limits.
 - c. Hours of operation (emergency).
 - d. For each emergency, the nature of the emergency condition.
 - e. Fuel usage for each engine(s).

[Basis: “Stationary Diesel Engine ATCM” section 93115, title 17, CA Code of Regulations, subsection (e)(4)(I), (or, Regulation 2-6-501)]

5. At School and Near-School Operation:

If the emergency standby engine is located on school grounds or within 500 feet of any school grounds, the following requirements shall apply:

The owner/operator shall not operate each stationary emergency standby diesel-fueled engine for non-emergency use, including maintenance and testing, during the following periods:

- a. Whenever there is a school-sponsored activity (if the engine is located on school grounds)
 - b. Between 7:30 a.m. and 3:30 p.m. on days when school is in session.
- “School” or “School Grounds” means any public or private school used for the purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in a private home(s). “School” or “School Grounds” includes any building or

VI. Permit Conditions

structure, athletic field, or other areas of school property but does not include unimproved school property.

[Basis: “Stationary Diesel Engine ATCM” section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(1)] or (e)(2)(B)(2)]

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), hourly (H), 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-1, S-2, S-3 AND S-4 COMBUSTION GAS TURBINES**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.2	N		9 ppmv @ 15% O2, dry or 0.43 lbs/MW-hr	BAAQMD 9-9-501 and BAAQMD condition #24955, part 22b	C	CEM
NOx	SIP 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501 and BAAQMD condition #24955, part 22b	C	CEM
NOx	BAAQMD Condition #24955, part 17b	N		2.5 ppmv @ 15% O2, dry, 1-hour average except during turbine startup or shutdown	BAAQMD condition #24955, part 22b	C	CEM

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S-1, S-2, S-3 AND S-4 COMBUSTION GAS TURBINES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD Condition #24955, part 17b	N		2.5 ppmv @ 15% O2, dry, 1-hour average except during turbine startup or shutdown	BAAQMD condition #24955, part 26	P/A	Source test
NOx	NSPS, 40 CFR 60.4320(a) KKKK Table 1	Y		42 ppmv @ 15% O2, dry Table 1	BAAQMD condition #24955, part 22b	C	CEM
NOx	None	Y		None	40 CFR 75.10	C	CEM
NOx (as NO ₂)	BAAQMD condition #24955, part 9a	Y		408 lb/day and 51 lb/hr from each gas turbine during commissioning, including startup and shutdown of the gas turbine	BAAQMD condition #24955, part 6 and 22b	C	CEM
NOx (as NO ₂)	BAAQMD condition #24955, part 17 b	Y		2.5 ppmv @ 15% O2, dry, 1-hour average except during turbine startup or shutdown	BAAQMD condition #24955, part 9 and 22b	C	CEM
NOx (as NO ₂)	BAAQMD condition #24955, part 17 b	Y		2.5 ppmv @ 15% O2, dry, 1-hour average except during turbine startup or shutdown	BAAQMD condition #24955, part 26	P/A	Source test
NOx (as NO ₂)	BAAQMD condition #24955, part 18	Y		18.5 lb/hr from each turbine during startup and/or shutdown	BAAQMD condition #24955, part 26	C	CEM
NOx (as NO ₂)	BAAQMD condition #24955, part 19a	Y		1100 lb/day from all turbines including startup and shutdown	BAAQMD condition #24955, part 22b	C	CEM

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S-1, S-2, S-3 AND S-4 COMBUSTION GAS TURBINES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx (as NO ₂)	BAAQMD condition #24955, part 20a	Y		45.6 tons/yr from all turbine including startup and shutdown	BAAQMD condition #24955, part 22b	C	CEM
CO	BAAQMD condition #24955, part 9a	Y		360 lb/day and 45 lb/hr from each gas turbines during commissioning, including startup and shutdown of the gas turbine	BAAQMD condition #24955, part 22b	C	CEM
CO	BAAQMD condition #24955, part 9	Y		8.7 tons/yr from each gas turbines during commissioning, including startup and shutdown of the gas turbine	BAAQMD condition #24955, part 22b	C	CEM
CO	BAAQMD condition #24955, part 17d	Y		2.0 ppm @ 15% O ₂ averaged over any rolling 3-hour period except during turbine startup and shutdown	BAAQMD condition #24955, part 22b	C	CEM
CO	BAAQMD condition #24955, part 17d	Y		2.0 ppm @ 15% O ₂ averaged over any rolling 3-hour period except during turbine startup and shutdown	BAAQMD condition #24955, part 26	P/A	Source Test
CO	BAAQMD condition #24955, part 18	Y		17.3 lb/hr from each turbine during startup and/or shutdown	BAAQMD condition #24955, part 26	C	CEM
CO	BAAQMD condition #24955, part 19b	Y		934 lb/day from all turbine including startup and shutdown	BAAQMD condition #24955, part 22b	C	CEM

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S-1, S-2, S-3 AND S-4 COMBUSTION GAS 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 #24955, part 20b	Y		27.2 tons/yr from all turbine including startup and shutdown	BAAQMD condition #24955, part 22b	C	CEM
CO ₂		Y		None	40 CFR 75.10	C	CEM (CO ₂) or CEM (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	
SO ₂	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD condition #24955, part 26	P/A	Source Test
SO ₂	NSPS 40 CFR 60.4330 KKKK	Y		0.90 lb of SO ₂ /MWh or 0.06 lb of SO ₂ /MMBtu	40 CFR 60.4365	N	None
SO ₂	None	Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3	P/M	Fuel measurements, calculation
SO ₂	BAAQMD condition #24955, part 9a	Y		10.8 lb/day for all turbines combined during commissioning, including startup and shutdown of turbines	BAAQMD Condition 24955, Part 23a	P/M	Fuel sulfur analysis records & calculation
SO ₂	BAAQMD condition #24955, part 17g	Y		1.347 lb/hr of SO ₂ from all turbines combined	BAAQMD Condition 24955, Part 23a	P/M	SO ₂ analysis records & calculation

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S-1, S-2, S-3 AND S-4 COMBUSTION GAS 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	BAAQMD condition #24955, part 17g	Y		1.347 lb/hr of SO ₂ from all turbines combined	BAAQMD Condition 24955, Part 26	P/A	Source Test
SO ₂	BAAQMD condition #24955, part 20e	Y		2.9 tons/yr of SO ₂ from all turbines combined including startup and shutdown of turbines except during commissioning	BAAQMD Condition 24955, Part 26	P/A	Source Test
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	Y		0.15 grain/dscf		N	
FP	SIP 6-310	Y		0.15 grain/dscf		N	
PM ₁₀	BAAQMD condition #24955, part 20d	Y		18.6 tons/yr from all turbine including startup and shutdown	BAAQMD condition #24955, part 26	P/A	Source test
PM ₁₀	BAAQMD condition #24955, part 9a	Y		20 lb/day for each turbine including startup and shutdown daily commissioning	BAAQMD condition #24955, part 23a	P/A	PM ₁₀ analysis records & calculation
POC	BAAQMD condition #24955, part 17f	Y		0.612 lbs/hr, does not apply during turbine startup or shutdown	BAAQMD condition #24955, part 23a	P/A	Source Test

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S-1, S-2, S-3 AND S-4 COMBUSTION GAS 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 #24955, part 20c	Y		5.6 ton/calendar year for all turbines combined, including startup and shutdown	BAAQMD condition #24955, part 25	P/A	Source test and calculation
NH ₃	BAAQMD condition #24955, Part 17e	N		5 ppmv @ 15% O ₂ , dry, Averaged over any rolling 3-hour rolling period average except during turbine startup or shutdown	BAAQMD condition #24955, parts 22 and 25	C	Ammonia injection + NO _x monitoring
NH ₃	BAAQMD condition #24955, Part 17e	N		5 ppmv @ 15% O ₂ , dry, except during turbine startup or shutdown	BAAQMD condition #24955, part 25	P/A	Source test
Heat input limit	BAAQMD condition #24955, part 12	Y		500 MM BTU/ hr (HHV)	BAAQMD condition #24955, part 22f	C	Records & Calculation
Heat input limit	BAAQMD condition #24955, part 13	Y		12,000 MM BTU/day (HHV)	BAAQMD condition #24955, part 22g	C	Records & Calculation
Stack gas flow	N/A			None	BAAQMD condition #24955, part 26	P/A	Source test every 8,000 hrs. or every 3 yrs., whichever comes first
NH ₃ injection rate	N/A			None	BAAQMD condition #24955, part 25	P/A	Source test

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S-1, S-2, S-3 AND S-4 COMBUSTION GAS TURBINES

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Formaldehyde	BAAQMD condition #24955 part 21	N		3725.26 pounds/year for all turbines combined	BAAQMD condition 24955 part 21	P Startup and biennial thereafter	Source Test
Specified PHA's	BAAQMD condition #24955 part 21	N		1.063 pounds/year for all turbines combined	BAAQMD condition #24955 part 21	P Startup and biennial thereafter	Source Test
Sulfuric Acid Mist	BAAQMD condition #24955 part 31	Y		7 tons/yr for all turbines	BAAQMD condition #24955 part 30	P/A	Source Test
Start-up Period	BAAQMD condition #24955, part 18			30 minutes per start-up	BAAQMD condition #20057, part 22	P/E	Records
Shut-down Period	BAAQMD condition #24955, part 15			15 minutes per shutdown	BAAQMD condition #24955, part 22	P/E	Records

VII. Applicable Limits & Compliance Monitoring Requirements

Table VII - B
Applicable Limits and Compliance Monitoring Requirements
S-6 DIESEL FIREWATER PUMP

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQMD 9-1-301	N		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 9-1-304	Y		Sulfur content of fuel <0.5% by weight		N	
Opacity	SIP Regulation 6-302	Y		< Ringelmann No 2 for more than 3 min/hr		N	
Opacity	BAAQMD Regulation 6-1-302	N		< Ringelmann No. 2 for more than 3 min/hr		N	
FP	SIP 6-310	Y		0.15 grain/dscf		N	
FP	BAAQMD 6-1-310	N		0.15 grain/dscf		N	
Hours of operation	BAAQMD 9-8-330.1, BAAQMD Condition #22850, Part 1	Y		Emergency use for an unlimited number of hours	BAAQMD 9-8-530 BAAQMD Condition #22850, Part 3	C P/E	Hour meter, recordkeeping
Hours of operation	BAAQMD 9-8-330.2, BAAQMD Condition #22850, Part 1	Y		Reliability-related activities not to exceed 50 hours in any consecutive 12-month period	BAAQMD 9-8-530 BAAQMD Condition #22850, Part 3	C P/E	Hour meter, recordkeeping

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 Limits & Compliance Monitoring Requirements, of this permit.

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-1-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
SIP 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-1-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
SIP 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
BAAQMD 6-1-311	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
SIP 6-311	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
BAAQMD 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling.
BAAQMD 9-1-304	Fuel Burning (Liquid and Solid Fuels)	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.
NSPS Subpart KKKK	Standards of Performance for Stationary Gas Turbines (2/24/06)	
60.4400 (a)(1)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.4415 (a)(1)	SO2 Volumetric Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.4415 (a)(1)(ii)	Fuel Sulfur Limit (gaseous fuel)	ASTM D1072-80, Standard Method for Total Sulfur in Fuel Gases. ASTM D3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation
BAAQMD Condition # 24955 for S-1, S-2, S-3, and S-4 Combustion Gas Turbines		
Part 17b	NOx Limit	ARB Method 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 17e	NH3 Limit	Manual of Procedures, Volume IV, ST-1B, Ammonia, Integrated Sampling

VIII. Test Methods

**Table VIII
Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
Part 17d	CO Limit	ARB Method 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 17f	POC Limit	ARB Method 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 20d	PM10 Limit	ARB Method 5, Determination of Particulate Matter Emissions from Stationary Sources
Part 17g	SOx Limit	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling or ST-19B, Total Sulfur Oxides, Integrated Sample

IX. TITLE IV ACID RAIN PERMIT

Effective Date _____ **through Date** _____

ISSUED TO:

**Mariposa Energy, LLC
Bruns & Kelso
Byron, CA 94514**

PLANT SITE LOCATION:

**Bruns & Kelso
Byron, CA 94514**

ISSUED BY:

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

Date

Type of Facility: Simple-Cycle Gas Turbine Peaking Facility
Primary SIC: 4911
Product: Electricity

DESIGNATED REPRESENTATIVE

Name: Mike Kromer
Title: Plant Manager
Address: 333 South Grand Avenue, Suite 1570
Los Angeles, CA 90071
Phone: (925) 337-3859

FACILITY CONTACT PERSON:

Name: Gary Normoyle
Title: Plant Engineer
Phone: (213) 620-7657

IX. Title V 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 Regulation 2, Rule 7.

2) SO₂ ALLOWANCE ALLOCATIONS

	Year	2014	2015	2016	2017	2018
	SO₂ allowances under Table 2 of 40 CFR Part 73	None	None	None	None	None
S-1, S-2, S-3, and S-4 Combustion Turbines	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

Pursuant to 40 CFR Part 72.6 (a)(3)(i), S-1, S-2, S-3, and S-4 are considered new utility units and are subject to the acid rain permit requirements of 72.9(a).

S-1, S-2, S-3, and S-4 Gas Turbines, are not listed in Table-2 of 40 CFR Part 73.

IX. Title V Acid Rain Permit

Therefore, the operator did not receive initial SO₂ allowances under the Acid Rain Program.

S-1, S-2, S-3, and S-4, Gas Turbines, do not qualify for new unit exemptions pursuant to 40 CFR 72.7

(b) (1) since each serve a generator with a nameplate capacity greater than 25 MW.

4) PERMIT APPLICATION

Attached as XIII. Title IV Acid Rain Application (Page 73)

X. PERMIT SHIELD

A. Non-applicable Requirements

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

There are no permit shields of this type for any sources at this facility.

B. Subsumed Requirements:

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

There are no permit shields of this type for any sources at this facility.

XI. REVISION HISTORY

This section contains the details of issuance and revision for each permit.

The initial Title V permit for this facility was submitted with the NSR application in February, 2013.

Initial Title V Permit
(Application No. 23399):

XII. GLOSSARY

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer

API

American Petroleum Institute

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

BARCT

Best Available Retrofit Control Technology

Basis

The underlying authority that allows the District to impose requirements.

C5

An Organic chemical compound with five carbon atoms

C6

An Organic chemical compound with six carbon atoms

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CAPCOA

California Air Pollution Control Officers Association

CEC

California Energy Commission

CEQA

California Environmental Quality Act

CEM

A "continuous emission monitor" is a monitoring device that provides a continuous direct measurement of some pollutant (e.g. NOx concentration) in an exhaust stream.

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

CO2
Carbon Dioxide

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

dscf
Dry Standard Cubic Feet

dscm
Dry Standard Cubic Meter

E 6, E 9, E 12
Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53 E 6 equals $(4.53) \times (10^6) = (4.53) \times (10 \times 10 \times 10 \times 10 \times 10 \times 10) = 4,530,000$. Scientific notation is used to express large or small numbers without writing out long strings of zeros.

EGT
Exhaust Gas Temperature

EPA
The federal Environmental Protection Agency.

Excluded
Not subject to any District Regulations.

Federally Enforceable, FE
All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

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

FR
Federal Register

GDF
Gasoline Dispensing Facility

GLM
Ground Level Monitor

grains
1/7000 of a pound

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.

H2S

Hydrogen Sulfide

HHV

Higher Heating Value. The quantity of heat evolved as determined by a calorimeter where the combustion products are cooled to 60F and all water vapor is condensed to liquid.

LHV

Lower Heating Value. Similar to the higher heating value (see HHV) except that the water produced by the combustion is not condensed but retained as vapor at 60F.

Major Facility

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

MFR

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

MOP

The District's Manual of Procedures

MSDS

Material Safety Data Sheet

MW

Megawatts

NA

Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPs

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

NMHC

Non-methane Hydrocarbons

NMOC

Non-methane Organic Compounds (Same as NMHC)

NOx

Oxides of nitrogen.

NSPS

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

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

O2

The chemical name for naturally-occurring oxygen gas.

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NOx, PM10, and SO2.

Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and 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

A "selective catalytic reduction" unit is an abatement device that reduces NOx concentrations in the exhaust stream of a combustion device. SCRs utilize a catalyst, which operates at a specific temperature range, and injected ammonia to promote the conversion of NOx compounds to nitrogen gas.

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.

SO2

Sulfur dioxide

SO2 Bubble

An SO2 bubble is an overall cap on the SO2 emissions from a defined group of sources, or from an entire facility. SO2 bubbles are sometimes used at refineries because combustion sources are typically fired entirely or in part by "refinery fuel gas" (RFG), a waste gas product from refining operations. Thus, total SO2 emissions may be conveniently quantified by monitoring the total amount of RFG that is consumed, and the concentration of H2S and other sulfur compounds in the RFG.

SO3

Sulfur trioxide

THC

Total Hydrocarbons (NMHC + Methane)

therm

100,000 British Thermal Unit

Title V

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

TOC
 Total Organic Compounds (NMOC + Methane, Same as THC)

TSP
 Total Suspended Particulate

TVP
 True Vapor Pressure

VOC
 Volatile Organic Compounds

Units of Measure:

bbl	=	barrel of liquid (42 gallons)
bhp	=	brake-horsepower
btu	=	British Thermal Unit
°C	=	degrees Celsius
°F	=	degrees Fahrenheit
f ³	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m ²	=	square meter
min	=	minute
M	=	thousand
Mg	=	mega-gram, one thousand grams
µg	=	micro-gram, one millionth of a gram
MM	=	million
mm	=	millimeter
MMbtu	=	million btu
mm Hg	=	millimeters of Mercury (pressure)
MW	=	megawatts
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

Symbols:

<	=	less than
>	=	greater than
≤	=	less than or equal to
≥	=	greater than or equal to

XIII. TITLE IV (ACID RAIN) APPLICATION