# **Bay Area Air Quality Management District**

375 Beale Street, Suite 600 San Francisco, CA 94105 (415) 749-5000

# Final

# **Major Facility Review Permit**

### Issued To: Los Medanos Energy Center, LLC Facility #B1866

**Facility Address:** 750 East Third Street Pittsburg, CA 94565

Mailing Address: PO Box 551 Pittsburg, CA 94565

**Responsible Official:** 

Jody Batten General Manager (480) 231-0533 Facility Contact: Maria Barroso EHS Specialist II (925) 529-8286

Type of Facility: Primary SIC: Product:

Power Plant 4911 Generation of Electricity BAAQMD Engineering Division Contact: Xuna Cai

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

<u>Signed by Damian Breen for Jack P. Broadbent</u> Jack P. Broadbent, Executive Officer/Air Pollution Control Officer <u>May 7, 2020</u> Date

### **TABLE OF CONTENTS**

I.	STAN	DARD CONDITIONS	3
	A.	Administrative Requirements	3
	B.	Conditions to Implement Regulation 2, Rule 6, Major Facility Review	3
	C.	Requirement to Pay Fees	5
	D.	Inspection and Entry	5
	E.	Records	5
	F.	Monitoring Reports	5
	G.	Compliance Certification	5
	H.	Emergency Provisions	6
	I.	Severability	6
	J.	Miscellaneous Conditions	6
	K.	Accidental Release	7
	L.	Conditions to Implement Regulation 2, Rule 7, Acid Rain	7
II.	EQUIF	MENT	8
III.	GENE	RALLY APPLICABLE REQUIREMENTS	10
IV.	SOUR	CE-SPECIFIC APPLICABLE REQUIREMENTS	14
V.	SCHEI	DULE OF COMPLIANCE	39
VI.	PERM	IT CONDITIONS	40
VII.	APPLI	CABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS	55
VIII.	TEST	METHODS	74
IX.	TITLE	IV ACID RAIN PERMIT	77
X.	PERM	IT SHIELD	79
	A.	Non-applicable Requirements	79
	В.	Subsumed Requirements	79
XI.	REVIS	ION HISTORY	80
XII.	GLOS	SARY	82
XIII.	TITLE	IV PERMIT APPLICATION	86

### 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 12/6/17): BAAQMD Regulation 2, Rule 2 - Permits, New Source Review (as amended by the District Board on 12/6/17); BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking (as amended by the District Board on 12/6/17); BAAQMD Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants (as amended by the District Board on 12/7/16); BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review (as amended by the District Board on 12/6/17), and SIP Regulation 2, Rule 6 – Permits, Major Facility Review (as approved by EPA through 6/23/95).

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

- 1. This Major Facility Review Permit was reissued on May 7, 2020 and expires on May 6, 2025. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than November 6, 2024 and no earlier than May 6, 2025. If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after May 6, 2025. (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2) If the permit renewal has not been issued by May 6, 2025, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application." (Regulation 2-6-307, 404.23, 407, &409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
- 3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)

- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records required to be maintained pursuant to this permit that the permittee considers proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B Public Information, Confidentiality of Business Information. (40 CFR Part 2)
- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
- 11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (Regulation 2-6-409,20, MOP Volume II, Part 3, §4.11)
- 12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless of whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307).

#### C. Requirement to Pay Fees

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

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

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment that is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

#### E. Records

- 1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
- 2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501; 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. Reports shall be for the following periods: April 1st through September 30th and October 1st through March 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 by e-mail to compliance@baaqmd.gov or by postal mail to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105 Attn: Title V Reports

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

#### G. Compliance Certification

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

each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent by e-mail to r9.aeo@epa.gov or postal mail to the Environmental Protection Agency at the following address:

Director Enforcement Division, TRI & Air Section (ENF-2-1) USEPA Region 9 75 Hawthorne Street San Francisco, California 94105

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

#### H. Emergency Provisions

- 1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
- 2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
- 3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

#### I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

#### J. Miscellaneous Conditions

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

#### K. Accidental Release

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

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

- 1. The permit holder shall hold one sulfur dioxide allowance on March 1 (February 29<sup>th</sup> during a 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 O<sub>2</sub> and NO<sub>x</sub> shall be maintained and operated in accordance with 40 CFR Parts 72 and 75. (Regulation 2-7, Acid Rain)
- 3. A written Quality Assurance program must be established in accordance with 40 CFR Part 75, Appendix B for NO<sub>x</sub> which includes, but is not limited to: procedures for daily calibration testing, quarterly linearity testing, record keeping and reporting implementation, and relative accuracy testing. (Regulation 2-7, Acid Rain)
- 4. The permit holder shall monitor SO<sub>2</sub> emissions in accordance with 40 CFR Part 72 and 75. (Regulation 2-7, Acid Rain)
- 5. The permit holder shall submit quarterly Electronic Data Reports (EDRs) to EPA for S-1 and S-3, Turbines, and S-2 and S-4, Heat Recovery Steam Generators. These reports must be submitted within 30 days following the end of each calendar quarter and shall include all information required in § 75.64. (40 CFR Part 75)

### **II. EQUIPMENT**

### **Table II A – Permitted Sources**

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

S-#	Description	Make or Type	Model	Capacity
1	Gas Turbine (natural gas), 190	General Electric	Frame 7FA	1,929 MM BTU/hr
	MW nominal		Model PG	(HHV)
			7241	
2	Heat Recovery Steam Generator			333 MM BTU/hr (HHV)
	(natural gas), 90 MW nominal			
3	Gas Turbine (natural gas), 190	General Electric	Frame 7FA	1,929 MM BTU/hr
	MW nominal		Model PG	(HHV)
			7241	
4	Heat Recovery Steam Generator			333 MM BTU/hr (HHV)
	(natural gas), 90 MW nominal			
5	Auxiliary Boiler (natural gas)	Nebraska	N25-8/5-	320 MM BTU/hr (HHV)
			126	3-hour rolling average
				(provides backup steam
				only, not used to generate
				electricity)
6	Diesel Fire Pump Engine	Cummins	6CFA8.2-	300 bhp
			F3	2.1 MMBTU/hr (HHV)
				504.5 cubic inch
				displacement
7	Natural-Gas Fired Emergency	Waukesha,	Model	925 bhp
	Generator	Turbocharged,	VGF 36GL	7.1 MMBTU/hr (HHV)
		Intercooled, Lean-Burn		2197 cubic inch
		Internal Combustion		displacement
		Engine		

### II. Equipment

		Source(s)	Applicable	Operating	Limit or
A-#	Description	Controlled	Requirement	Parameters	Efficiency
1	Selective Catalytic	S-1, S-2	BAAQMD	None	2.5 ppmv
	Reduction System		Condition		NO <sub>x</sub> @ 15%
			#16676,		O2, dry, 1-hr
			part 21b		average
2	Oxidation Catalyst	S-1, S-2	BAAQMD	None	6 ppmv CO
			Condition		@ 15% O <sub>2</sub> ,
			#16676,		dry, 3-hr
			part 21d		average
3	Selective Catalytic	S-3, S-4	BAAQMD	None	2.5 ppmv
	Reduction System		Condition		NO <sub>x</sub> @ 15%
			#16676,		O <sub>2</sub> , dry, 1-hr
			part 21b		average
4	Oxidation Catalyst	S-3, S-4	BAAQMD	None	6 ppmv CO
			Condition		@ 15% O <sub>2</sub> ,
			#16676,		dry, 3-hr
			part 21d		average
5	Selective Catalytic	S-5	BAAQMD	None	9 ppmv NO <sub>x</sub>
	Reduction System		Condition		@ 3% O <sub>2</sub> ,
			#16676,		dry, 3-hr
			part 29		average

### **Table II B – Abatement Devices**

### Table II C – Significant Sources

The following source is exempt from the requirement to obtain an authority to construct and permit to operate, but is defined as a significant source pursuant to BAAQMD Regulation 2-6-239.

S-#	Description	Make or Type	Model	Capacity
8	Cooling Tower			8 cell
				110,600 gpm

### III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements would not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit.

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 such as sandblasting equipment may be operated at the facility as long as the source is not significant under Rule 2-6-239. Otherwise the significant source would need to be included in the Title V permit.

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

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

The full language of SIP requirements is on EPA Region 9's website. The address is:

https://www.epa.gov/sips-ca/epa-approved-bay-area-air-district-regulations-california-sip

### NOTE:

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

## **III. Generally Applicable Requirements**

Applicable	Regulation Title or	Federally Enforceable
Requirement	Description of Requirement	(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 (12/6/17)	N
BAAQMD Regulation 2, Rule 2	Permits, New Source Review (12/6/17)	N
BAAQMD Regulation 2, Rule 3	Permits, Power Plants (12/19/79)	Y
BAAQMD Regulation 2, Rule 4	Permits, Emissions Banking (12/6/17)	N
BAAQMD Regulation 3	Fees	N
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
SIP Regulation 4, Table 1	Air Pollution Episode Plan, Episode Stage Criteria (8/6/90)	Y
BAAQMD Regulation 5	Open Burning (6/19/13)	Ν
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (8/1/18)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N Y
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	N I
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)	IN
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
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

# Table IIIGenerally Applicable Requirements

## **III. Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/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)	Ν
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)	Ν
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)	Ν
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)	Y
BAAQMD Regulation 11, Rule 18	Reduction of Risk from Air Toxic Emissions at Existing Facilities (11/15/17)	Ν
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	Ν
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y
BAAQMD Regulation 14, Rule 1	Mobile Source Emission Reduction Methods – Bay Area Commuter Benefits Program (3/19/14)	Ν
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	Ν
California Health and Safety Code Section 41750 et seq.	Portable Equipment	Ν
California Health and Safety Code Title 17, Section 93115 et seq.	Airborne Toxic Control Measure for Stationary Compression Ignition Engines	Ν
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 (6/19/95)	Y

# Table IIIGenerally Applicable Requirements

## **III. Generally Applicable Requirements**

Applicable	Regulation Title or	Federally Enforceable
Requirement	Description of Requirement	(Y/N)
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (03/12/04)	Y
Subpart F, 40 CFR 82.156	Recycling and Emissions Reductions – Required	Y
	Practices (04/13/05)	
Subpart F, 40 CFR 82.161	Recycling and Emissions Reductions – Technician	Y
	Certification (04/13/05)	
Subpart F, 40 CFR 82.166	Recycling and Emissions Reductions – Reporting and	Y
	Recordkeeping Provisions (04/13/05)	
40 CFR Part 82, Subpart H	Protection of Stratospheric Ozone; Halon Emissions	Y
	Reduction (03/05/98)	
Title 40 Part 82 Subpart H	Prohibitions, Halon (03/05/98)	Y
82.270(b)		

# Table IIIGenerally Applicable Requirements

### **IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS**

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

The dates in 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. The full language of SIP requirements is on EPA Region 9's website. The address: is

https://www.epa.gov/sips-ca/epa-approved-bay-area-air-district-regulations-california-sip

All other text may be found in the regulations themselves.

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	General Provisions and Definitions (5/4/11)		
<b>Regulation 1</b>			
1-107	Combination of Emissions	Y	
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NO <sub>x</sub> , CO <sub>2</sub> , or O <sub>2</sub>	Y	
1-520.8	Monitors required per Reg. 2-1-403	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-522.1	approval of plans and specifications	Y	
1-522.2	scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	emission limit exceedance reporting requirements	Ν	

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
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 non operation	Y	
1-523.2	Limits on periods of non operation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records	Y	
1-523.5	Maintenance and calibration	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
SIP	General Provisions and Definitions (6/28/99)		
<b>Regulation 1</b>			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
BAAQMD	Regulation 2, Rule 1 - Permits, General Requirements (12/6/17)		
Regulation 2,			
Rule 1			
2-1-501	Monitors	Y	
BAAQMD	Particulate Matter, General Requirements (8/1/18)		
Regulation 6, Rule 1			
6-1-114.1	Limited Exemption, Total Suspended Particulate (TSP) Emission Limit for Fuel Combustion. (Gas Turbines and HRSG)	Ν	
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-304	Tube Cleaning (HRSG Only)	N	
6-1-305	Visible Particles	N	
6-1-310.1	Total Suspended Particulate (TSP) Concentration Limit	N	
6-1-310.3	Heat Transfer Operations (HRSG Only)	Ν	
6-1-401	Appearance of Emissions	Ν	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
<b>Regulation 6</b>			
6-301	Ringelmann Number 1 Limitation	Y	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
6-304	Tube Cleaning (HRSG Only)	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-401	Appearance of Emissions	Y	
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	Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat Transfer Operations (3/17/82)		
9, Rule 3	Name of Madifield Hard Transford Operation Limits	N	
9-3-303	New or Modified Heat Transfer Operation Limits	N	
SIP Regulation 9, Rule 3	Inorganic Gaseous Pollutants – Nitrogen Oxides from Heat Transfer Operations (7/6/82)		
9-3-303	Nitrogen oxide emission limitation	Y	
BAAQMD Regulation 9,	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/6/06, Applies to Gas Turbines)		
Rule 9			
9-9-113	Exemption – Inspection/Maintenance	Ν	
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, General	Ν	
9-9-401	Certification, Efficiency	N	
9-9-501	Monitoring and recordkeeping requirements	N	
SIP	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary		
Regulation 9 Rule 9	Gas Turbines (4/17/97, Applies to Gas Turbines)		
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-9-301	Emission Limits, General	Y	Date
9-9-301.3	Emission Limits, Ceneral Emission Limits, Turbines greater than 10 MW with SCR, NO <sub>x</sub> less than 9 ppmv (dry, 15% O <sub>2</sub> )	Y	
9-9-501	Monitoring and recordkeeping requirements	Y	
BAAQMD	NSPS Incorporation by Reference, Stationary Gas Turbines		
Regulation 10 Subpart GG	(2/16/2000)		
10-40.	Subpart GG - Standards of Performance For Stationary Gas Turbines	Y	
BAAQMD Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
40 CFR 60	Standards of Performance for New Stationary Sources – General	Y	
Subpart A	Provisions (1/28/09)		
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	
60.13	Monitoring Requirements	Y	
60.18	General Control Device Requirements	Y	
60.19	General notification and reporting requirements	Y	
Subpart Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978 (1/28/09, Applies to Heat Recovery Steam Generators)	Y	
60.42Da(a)(1)	Particulate Limit	Y	
60.42Da(b)	Opacity Limit	Y	
60.43Da(b)(2)	SO <sub>2</sub> limit	Y	
60.43Da(g)	Averaging 30-day rolling average (24-hour for Bay Area)	Y	
60.44Da(a)(1)	NO <sub>x</sub> limit 0.2 lb/MMBtu	Y	
60.44Da(a)(2)	NOx reduction requirement of 25% for gaseous fuels	Y	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.44Da(d)(1)	NOx limit-1.6 lbs/MW-hr	Y	
60.48Da	Compliance provisions	Y	
60.48Da(j)	Compliance provisions for duct burners subject to Section 60.44Da(a)(1)	Y	
60.48Da(k)	Compliance provisions for duct burners subject to Section 60.44Da(d)(1)	Y	
60.48Da(q)	Compliance provisions for sources subject to 60.42Da(b)	Y	
60.49Da	Emission monitoring	Y	
60.49Da(a)	Opacity monitoring <sup>1</sup>	Y	
60.49Da(c)	NO <sub>x</sub> CEMs	Y	
60.49Da(k)	MW output monitoring	Y	
60.49Da(n)	Fuel flow monitoring	Y	
60.49Da(o)	Duct burners not required to install CEM for NO <sub>x</sub> , wattmeter for MW, gauges for steam flow and pressure, and continuous flow monitoring system.	Y	
60.49Da(s)	Unit specific monitoring plan for each monitoring system.	Y	
60.50Da	Compliance determination procedures and methods	Y	
60.51Da	Reporting Requirements	Y	
60.51Da(f)	For any periods for which NO <sub>x</sub> emissions data are unavailable	Y	
60.51Da(h)	Signed Statement indicating CEM quality assurance requirements have been performed, data used to show compliance obtained in accordance with approved methods and procedures, minimum data requirements met, compliance with standards achieved during reporting period.	Y	
60.51Da(i)	Opacity exceedances	Y	
60.51Da(j)	Semiannual reports	Y	
60.52Da	Recordkeeping Requirements	Y	
60.52Da(b)	Opacity recordkeeping		
Subpart GG	Standards of Performance for Stationary Gas Turbines (2/24/06, Applies to Gas Turbines)		

<sup>&</sup>lt;sup>1</sup> The EPA has promulgated changes to Subpart Da in direct final rule action (Federal Register, January 20, 2011) allowing the permitting authority to exempt owners/operators of affected facilities burning only natural gas from the opacity monitoring requirements contained in 60.49Da(a)(3). The District is exempting the facility from the opacity monitoring requirement contained in 60.49Da(a)(3).

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.332(a)(1)	NO <sub>x</sub> limit	Y	
60.333	Standard for sulfur dioxide	Y	
60.333(a)	SO <sub>2</sub> Concentration < 0.015 percent @15% O <sub>2</sub> (Turbine Only)	Y	
60.333(b)	Fuel Sulfur Content cannot exceed 0.8 percent by weight (Turbine Only)	Y	
60.334	Monitoring of operations	Y	
60.334(c)	NO <sub>x</sub> CEMs	Y	
60.334(h)(3)	Exemption from sulfur fuel monitoring requirements (Natural Gas)	Y	
60.334(j)(1) (iii)	NOx Excess Emissions and Monitor Downtime reporting requirements	Y	
60.335	Test Methods and Procedures	Y	
40 CFR 60	Performance Specifications	Y	
Appendix B	-		
Performance	Specifications and test procedures for SO2 and NOx continuous	Y	
Specification 2	emission monitoring systems in stationary sources		
Performance	Specifications and test procedures for $O_2$ and $CO_2$ continuous emission	Y	
Specification 3	monitoring systems		
40 CFR 60	Quality Assurance Procedures		
Appendix F			
Procedure 1	Quality assurance requirements for gas continuous emission	Y	
40.000	monitoring systems used for compliance determination		
40 CFR	Title IV – Acid Rain Program	Y	
Part 72			
	Subpart A – Acid Rain Program General Requirements		
72.6	Applicability	Y	
72.6(a)(3)	New utility unit (at the time of commencement of commercial operation)	Y	
72.9	Standard Requirements	Y	
72.9(a)	Permit Requirements	Y	
72.9(a)(1)(i)	Submittal of a complete acid rain permit application	Y	
72.9(a)(1)(iii)	Submittal of information in a timely manner	Y	
72.9(a)(2)(i)	Operation in compliance with Acid Rain permit	Y	
72.9(a)(2)(ii)	Have an Acid Rain Permit	Y	

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
72.9(b)	Monitoring Requirements	Y	
72.9(c)	Sulfur Dioxide Requirements	Y	
72.9(c)(1)	Requirement to hold allowances as of allowance transfer deadline	Y	
72.9(c)(2)	Each ton of excess $SO_2$ emissions is a separate violation of the CAA	Y	
72.9(c)(3)	Initial deadline to hold allowances	Y	
72.9(c)(3)(iv)	Deadline at time of monitor certification	Y	
72.9(c)(4)	Use of Allowance Tracking System	Y	
72.9(c)(5)	Allowances may not be deducted prior to year for which allowance was allocated	Y	
72.9(c)(6)	Limited authorization	Y	
72.9(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	Y	
	6 months prior to expiration of current acid rain permit.		
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	Y	
	unit, the date that the unit has commenced or will commence operation		
	and the deadline for monitor certification.		
72.32	Permit application shield and binding effect of permit application	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	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
72.50(b)	Permits include terms in 40 CFR 72.2	Y	
72.51	Permit Shield	Y	
40 CFR Part 75	Code of Federal Regulations, Continuous Emissions Monitoring	Y	
	Subpart A – General	Y	
75.2	Applicability	Y	
75.2(a)	Applicability to affected units subject to Acid Rain emission limitations	Y	
75.2(c)	The provisions of this part apply to sources subject to a State or federal NO <sub>X</sub> 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 <sub>2</sub> , NO <sub>x</sub> , CO <sub>2</sub> , 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 <sub>2</sub> Emissions, except as provided in §§75.11 and 75.16 and subpart E of this part	Y	
75.10(a)(2)	NO <sub>x</sub> Emissions, except as provided in §§75.12 and 75.17 and subpart E of this part	Y	
75.10(a)(3)	CO <sub>2</sub> Emissions	Y	
75.10(a)(3) (ii)	CO <sub>2</sub> Emissions estimated using Carbon Content of fuel and procedures in Appendix G.	Y	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.10(b)	Primary Equipment Performance Requirements	Y	
	Requires each CEM to meet equipment, installation, and performance		
	specifications in part 75, Appendix A and quality assurance/quality		
	control requirements in part 75 Appendix B.		
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 <sub>2</sub> emissions	Y	
75.11(d)	Gas-fired and oil-fired units	Y	
75.11(d)(2)	Allows the use of Appendix D Optional SO <sub>2</sub> Emissions Data Protocol for Gas-Fired and Oil-Fired Units to monitor SO <sub>2</sub> emissions.	Y	
75.12	Specific provisions for monitoring NO <sub>x</sub> emission rates	Y	
75.12(a)	NO <sub>x</sub> continuous emission monitor and diluent monitoring requirement	Y	
75.12(c)	NO <sub>x</sub> mass emission rate determination according to Appendix F	Y	
75.13	Specific provisions for monitoring CO <sub>2</sub> emissions	Y	
75.13(b)	Determination of CO <sub>2</sub> 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	Y	
-	monitoring systems under appendices D and E		
75.21	Quality assurance and quality control requirements	Y	
75.21(a)	Continuous emission monitoring systems	Y	
75.21(c)	Calibration gases	Y	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.21(d)	Notification for periodic Relative Accuracy Test Audits	Y	
75.21(e)	Consequences of audits	Y	
75.22	Reference test methods	Y	
75.24	Out-of-control periods and adjustment for system bias	Y	
	Subpart D – Missing Data Substitution Procedures	Y	
75.30	General Provisions	Y	
75.30(a)	Owner/operator shall provide substitute data for each affected unit using a continuous emission monitor according to this subpart whenever the unit is combusting fuel.	Y	
75.31	Initial missing data procedures	Y	
75.32	Determination of monitor data availability for standard missing data procedures	Y	
75.33	Standard missing data procedures for SO, NO, Hg, and flow rate	Y	
75.33(a)	Following initial certification and after following initial missing data procedures for 2,160 quality assured operating hours for NO <sub>x</sub> 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 <sub>x</sub> emission rate and NO <sub>x</sub> concentration data	Y	
75.34	Units with add-on emission controls	Y	
75.35	Missing data procedures for CO <sub>2</sub>	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	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 <sub>2</sub> emission record provisions	Y	
75.57(d)	NO <sub>x</sub> emission record provisions	Y	
75.57(e)	CO <sub>2</sub> emission record provisions	Y	
75.57(g)	Diluent record provisions	Y	
75.57(h)	Missing data records	Y	
75.58	General recordkeeping provisions for specific situations	Y	
75.58(b)	Specific parametric data record provisions for calculating substitute emissions data for units with add-on emission controls	Y	
75.58(c)	Specific SO <sub>2</sub> 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 <sub>2</sub> mass emissions	Y	
75.59	Certification, quality assurance, and quality control record provisions	Y	
75.59(a)	Continuous emission or opacity monitoring systems	Y	
75.59(b)	Excepted monitoring systems for gas-fired and oil-fired units. The owner or operator shall record the applicable information in this section for each excepted monitoring system following the requirements of appendix D to this part or appendix E to this part for determining and recording emissions from an affected unit.	Y	
75.59(c)	Except as otherwise provided in $$75.58(b)(3)(i)$ , units with add-on SO <sub>2</sub> or NO <sub>x</sub> emission controls following the provisions of $$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	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.59(f)	DAHS Verification. For each DAHS (missing data and formula)	Y	
	verification that is required for initial certification, recertification, or		
	for certain diagnostic testing of a monitoring system, record the date		
	and hour that the DAHS verification is successfully completed. (This		
	requirement only applies to units that report monitoring plan data in		
	accordance with §75.53(g) and (h).)		
	Subpart G – Reporting Requirements	Y	
75.60	General Provisions	Y	
75.61	Notifications	Y	
75.62	Monitoring plan submittals	Y	
75.63	Initial certification or recertification application	Y	
75.64	Quarterly reports	Y	
75.66	Petitions to the administrator	Y	
BAAQMD			
Condition			
#16676			
Definitions	Definitions	Y	
part 14	Requirement for combustion of natural gas with a maximum sulfur	Y	
*	content of 1 gr/100 scf (BACT for SO <sub>2</sub> and PM <sub>10</sub> )		
part 15	Hourly heat input limit (PSD for NO <sub>x</sub> )	Y	
part 16	Daily heat input limit (PSD for PM <sub>10</sub> )	Y	
part 17	Annual heat input limit (Offsets)	Y	
part 18	Duct burners shall not be fired unless turbines are in operation (BACT for NO <sub>x</sub> , CO, POC)		
part 19	Oxidizing catalyst and SCR requirement for S-1 (BACT for NO <sub>x</sub> and CO)	Y	
part 20	Oxidizing catalyst and SCR requirement for S-3 (BACT for NO <sub>x</sub> and CO)		
part 21	Emission limits (BACT, PSD, and Toxic Risk Management Policy)	Y	
part 21a	Hourly and heat-input rate NO <sub>x</sub> limits (PSD for NO <sub>x</sub> )	Y	
part 21b	NO <sub>x</sub> concentration limit (BACT for NO <sub>x</sub> )	Y	
part 21c	Hourly and heat-input rate CO limits (PSD for CO)	Y	
part 21d	CO concentration limit (BACT for CO)	Y	

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
part 21e	Ammonia concentration limit and monitoring (Regulation 2, Rule 5 for NH <sub>3</sub> )	Ν	
part 21f	Hourly and heat-input rate POC limits (BACT for POC)	Y	
part 21g	Hourly and heat-input rate SO <sub>2</sub> limits (BACT for SO <sub>2</sub> )	Y	
part 21h	Hourly and heat-input rate PM10 limits (BACT for PM10)	Y	
part 23	Limits during startup, shutdown, steam turbine cold start-up, or combustor tuning (PSD)	Y	
part 24	Turbines may not be in startup mode simultaneously	Y	
part 24	Limit on operation to support steam turbine cold start-up or combustor tuning (PSD)	Y	
part 30	Facility daily heat input limit (PSD, CEC Offsets)	Y	
part 31	Facility annual heat input limit (Offsets)	Y	
part 32	Facility daily emission limits (CEQA, PSD, BACT)	Y	
part 33	Facility annual emission limits (Offsets, PSD, Cumulative Increase)	Y	
part 34	Facility annual emission limits for toxic air contaminants (Regulation 2, Rule 5)	Ν	
part 35	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	
part 36	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	
part 37	Calculation of emissions and recordkeeping for toxic air contaminants (Regulation 2, Rule 5)	Ν	
part 38	Ammonia source test (Regulation 2, Rule 5)	Ν	
part 39	Source to assure compliance with part 21a, b, c, d and f (BACT, offsets)	Y	
part 41	District review of source test procedures (BACT)	Y	
part 42	Initial and biennial source tests for toxic air contaminants (Regulation 2, Rule 5)	Ν	
part 43	Submittal of reports (2-6-502)	Y	
part 44	Retention of records for five years (2-6-501)	Y	
part 45	Notification of violations to District (2-1-403)	Y	
part 46	Stack heights (PSD, Regulation 2, Rule 5)	Y	
part 47	Sampling ports and platforms (1-501)	Y	
part 55	Records of steam turbine cold start-ups and combustor tuning (PSD)	Y	

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)		
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NO <sub>x</sub> , CO <sub>2</sub> or O <sub>2</sub>	Y	
1-520.8	Monitors required per Reg. 2-1-403	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
SIP	General Provisions and Definitions (6/28/99)		
Regulation 1			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
BAAQMD	Particulate Matter, General Requirements (8/1/18)		
Regulation 6,			
Rule 1			
6-1-114.1	Limited Exemption, Total Suspended Particulate (TSP) Emission Limit for Fuel Combustion. (Boilers)	Ν	
6-1-301	Ringelmann Number 1 Limitation	Ν	
6-1-304	Tube Cleaning	N	
6-1-305	Visible Particles	Ν	
6-1-310.1	Total Suspended Particulate (TSP) Concentration Limits	Ν	
6-1-310.3	Heat Transfer Operations	Ν	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
<b>Regulation 6</b>			
6-301	Ringelmann Number 1 Limitation	Y	
6-304	Tube Cleaning	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
BAAQMD			
Regulation 9,	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement		(Y/N)	Date
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat		
Regulation	Transfer Operations (3/17/82)		
9, Rule 3			
9-3-303	New or Modified Heat Transfer Operation Limits	Y	
SIP	Inorganic Gaseous Pollutants – Nitrogen Oxides from Heat Transfer		
Regulation 9,	Operations (7/6/82)		
Rule 3			
9-3-303	Nitrogen oxide emission limitation	Y	
BAAQMD	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon		
Regulation 9,	Monoxide from Industrial, Institutional, and Commercial		
Rule 7	Boilers, Steam Generators, and Process Heaters (5/4/11)		
9-7-117	Limited Exemption, Devices Rated 75 MM BTU/hr or Higher		
	Limited to 9 PPMV NO <sub>x</sub> : The emission limits of Section 9-7-		
	307.6 shall not apply to any boiler, steam generator or process		
	heater that is limited to 9 ppmv NO <sub>x</sub>		
9-7-301	Emission Limits-Gaseous Fuel	Y	
9-7-301.1	Emission Limits-NO <sub>x</sub> , 30 ppm	Y	
9-7-301.4	Emission Limits-CO, 400 ppm	Y	
SIP	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon		
Regulation 9,	Monoxide from Industrial, Institutional, and Commercial		
Rule 7	Boilers, Steam Generators, and Process Heaters (4/17/97)		
9-7-301	Emission Limits-Gaseous Fuel	Y	
9-7-301.1	Emission Limits-NO <sub>x</sub>	Y	
9-7-301.2	Emission Limits-CO	Y	
9-7-503	Records	Y	
9-7-503.4	Source test records	Y	
BAAQMD	Continuous Emission Monitoring Policy and Procedures		
Manual of	(1/20/82)		
Procedures,			
Volume V			
40 CFR 60	Standards of Performance for New Stationary Sources –	Y	

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
Subpart A	General Provisions (1/28/09)		
60.7	Notification and record keeping	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11	Compliance with standards and maintenance requirement	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
Subpart Db	Standards of Performance for Industrial-Commercial- Institutional Steam Generating Units (12/16/87)	Y	
60.44b(a)(4)	NO <sub>x</sub> Emission Limit	Y	
60.44b(h)	NO <sub>x</sub> limit applicable at all times	Y	
60.44b(i)	Compliance: 24-hr day averaging period (per BAAQMD Regulation 10, part 4)	Y	
60.46b(a)	NO <sub>x</sub> limits apply at all times	Y	
60.46b(c)	Compliance with NO <sub>x</sub> limit	Y	
60.46b(e)	Performance test for NO <sub>x</sub>	Y	
60.48b(b)	CEMs for NO <sub>x</sub> Standard, except as provided in (g), (h), and (i) of this section	Y	
60.49b(a)	Notification of Initial Startup	Y	
60.49b(b)	Submittal of Performance Test Reports and CEM performance evaluation	Y	
60.49b(d)	Fuel records	Y	
60.49b(g)	Records for each day of operation	Y	
60.49b(h)(2)	Excess emission reports	Y	
60.49b(o)	Records retention for two years	Y	
BAAQMD			
Condition			
#16676			
Definitions	Definitions	Y	
part 25	Requirement for combustion of natural gas with a maximum sulfur content of 1 gr/100 scf (BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 26	Hourly heat input limit (Cumulative Increase)	Y	
part 27	Annual heat input limit (Cumulative Increase)	Y	T

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
part 28	Emission limits (BACT, PSD)	Y	
part 28a	Hourly NO <sub>x</sub> limits (PSD for NO <sub>x</sub> )	Y	
part 28b	NO <sub>x</sub> concentration limit (BACT for NO <sub>x</sub> )	Y	
part 28c	Hourly CO limit (PSD for CO)	Y	
part 28d	CO concentration limit (BACT for CO)	Y	
part 28e	Hourly POC limit (BACT for POC)	Y	
part 28f	Hourly SO <sub>2</sub> limit (BACT for SO <sub>2</sub> )	Y	
part 28g	Hourly PM <sub>10</sub> limit (BACT for PM <sub>10</sub> )	Y	
part 28h	NH <sub>3</sub> concentration limit (Regulation 2, Rule 5)	N	
part 29	Requirement for design for future installation of Oxidizing Catalyst (BACT for CO)	Y	
part 29	Requirement for SCR system (BACT for NO <sub>x</sub> )	Y	
part 30	Facility daily heat input limit (PSD, CEC Offsets)	Y	
part 31	Facility annual heat input limit (Offsets)	Y	
part 32	Facility daily emission limits (CEQA, PSD, BACT)	Y	
part 33	Facility annual emission limits (Offsets, PSD, Cumulative Increase)	Y	
part 34	Facility annual emission limits for toxic air contaminants (Regulation 2, Rule 5)	N	
part 35	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	
part 36	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	
part 37	Calculation of emissions and recordkeeping for toxic air contaminants (Regulation 2, Rule 5)	N	
part 40	Source to assure compliance with part 28a-d (BACT, offsets)	Y	
part 41	District review of source test procedures (BACT)	Y	
part 43	Submittal of reports (2-6-502)	Y	
part 44	Retention of records for five years (2-6-502)	Y	
part 45	Notification of violations to District (2-1-403)	Y	
part 47	Sampling ports and platforms (1-501)	Y	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (8/1/18)		
Regulation 6,			
Rule 1			
6-1-303	Ringelmann Number 2 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310.1	Total Suspended Particulate (TSP) Concentration Limits	N	
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
Regulation 6			
6-303	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,	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
SIP			
Regulation 9,	Inorganic Gaseous Pollutants - Sulfur Dioxide (6/8/99)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary		
Regulation 9,	Engines (7/25/07)		
Rule 8			
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	
9-8-502.1	Recordkeeping, Emergency Standby Engines	N	
9-8-530	Emergency standby engines, monitoring and recordkeeping	Ν	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
40 CFR Part	National Emissions Standards for Hazardous Air Pollutants for		
63	Source Categories, Subpart A – General Provisions		
Subpart A			
63.1	General Applicability of the General Provisions	Y	
63.2	Definitions	Y	
63.3	Units and Abbreviations	Y	
63.4	Prohibited activities and circumvention	Y	
63.6(a)	Compliance with standards and maintenance requirements -	Y	
	Applicability		
63.6(c)	Compliance dates for existing sources	Y	
63.6(f)(2)	Methods for determining compliance	Y	
63.6(f)(3)	Finding of compliance	Y	
63.6(g)	Use of an alternative nonopacity emission standard	Y	
63.6(i)	Compliance extension procedures and criteria	Y	
63.6(j)	Presidential compliance exemption	Y	
63.10(a)	Recordkeeping and reporting requirements, applicability and general	Y	
	information		
63.10(b)(1)	Record retention	Y	
63.10(f)	Administrator waiver of recordkeeping or reporting requirements	Y	
63.12	State authority and delegations	Y	
63.13	Addresses of air pollution control agencies and EPA Regional	Y	
	Offices		
63.14	Incorporation by reference	Y	
63.15	Availability of information and confidentiality	Y	
40 CFR Part	National Emissions Standards for Hazardous Air Pollutants for		
63	Stationary Reciprocating Internal Combustion Engines (RICE)		
Subpart			
ZZZZ			
63.6585	Applicability		
63.6585(a)	Applicable to Stationary RICE		
63.6585(c)	Applicable to Area Source of HAPs		
63.6590(a)(1)	Affected source under stationary RICE located at an area source of	Y	
(iii)	HAP emissions, constructed before 6/12/06		
63.6595(a)	Comply with applicable emission limitations and operating	Y	
	limitations by 5/3/13.		
63.6595(c)	Comply with applicable notification requirements in 63.6645 and 40	Y	
	CFR Part 63, subpart A (Note there are no applicable notification		
	requirements under either of these sections)		

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
63.6603 (a)	Comply with requirements of Table 2d (operating limitations of	Y	Dutt
	Tables 1b and 2b do not apply):		
	1. Change oil & filter every 500 hours of operation or annually,		
	whichever comes first. Oil analysis program may be used to extend		
	period.		
	2. Inspect air cleaner every 1000 hours or annually, whichever		
	comes first, and replace as necessary.		
	3. Inspect all hoses and belts every 500 hours or annually, whichever		
	comes first, and replace as necessary.		
63.6605	General Requirements	Y	
	1. Must be in compliance with applicable emission limitations and		
	operating limitations		
	2. Operate engine in a manner consistent with safety and good air		
(2.((25(.)(2)	pollution control practices to minimize emissions.	37	
63.6625(e)(3)	Maintain RICE and abatement controls according to manufacturer's	Y	
(2)((254))	instructions or develop own plan.		
63.6625(h)	Minimize idling, and minimize startup time to not exceed 30		
(2)((4)(-))	mintutes.	Y	
63.6640(a)	Demonstrate compliance with the requirements of Table 2d	Ŷ	
62 6640(h)	according to work or management practices of Table 6, Part 9a.	V	
63.6640(b)	Report deviations from the requirements of Table 2d.	Y	
63.6640(e)	Report non-compliance with the any applicable requirement of Table 8.	Y	
63.6640(f)	Comply with requirements of $(f)(1)(i)$ through (iii) below	Y	
63.6640(f)(1)	No time limit when engine is used for emergencies	Y	
(i)			
63.6640(f)(1)	Operation of engine for maintenance checks and readiness testing	Y	
(ii)	limited to 100 hours per year		
63.6640(f)(1)	Operation of engine for non-emergency and not associated with	Y	
(iii)	maintenance checks and readiness testing is limited to 50 hours,		
	which is counted towards the 100 hours per year maximum specified		
<u> </u>	in 63.6640(f)(1)(ii)		
63.6645(a)(5)	The notification requirements of 63.6645(a) do not apply to this	Y	
	engine.		
63.6655	Record Keeping	Y	
	1. Record hours of operation		
	2. Install non-resettable hour meter		
63.6660	Instructions for Records	Y	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.6670	Implementation and enforcement of Subpart ZZZZ	Y	2
Section	Airborne Toxic Control Measure for Stationary Compression		
93115, title	Ignition Engines (5/19/11)		
17, CCR			
93115.5(b)	Fuel Requirements	Ν	
93115.6(b)(3)	PM Emission Standards & Maximum Hours of Operation for	Ν	
(A)	Maintenance and Testing		
93115.6(b)(3) (B)	Applicable Emissions Standards for HC, NO <sub>x</sub> , NMHC+NO <sub>x</sub> , and CO	Ν	
93115.10	Recordkeeping, Reporting and Monitoring Requirements	N	
93115.10(a)	Reporting	Ν	
93115.10(c)	Demonstration of Compliance with Emission Limits	Ν	
93115.10(e)	Monitoring Equipment	Ν	
93115.10(g)	Monthly Log: Data Required	Ν	
93115.10(g).	Data Log Retention	Ν	
93115.12	Tiered Compliance Schedule	Ν	
BAAQMD Condition #22851			
part 1	34 hours/year for maintenance and testing. (Stationary Diesel Engine ATCM" section 93115, title 17 CCR, Regulation 2, Rule 5)	Ν	
part 2	Unlimited Emergency Use, (Stationary Diesel Engine ATCM" section 93115, title 17 CCR)	Ν	
part 3	Totalizing Meter, (Stationary Diesel Engine ATCM" section 93115, title 17 CCR)	Ν	
part 4	Recordkeeping, (Stationary Diesel Engine ATCM" section 93115, title 17 CCR, Regulation 2-6-501)	Ν	
part 5	Near School Conditions, (Stationary Diesel Engine ATCM" section 93115, title 17 CCR)	Ν	

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (8/1/18)		
Regulation 6,			
Rule 1			
6-1-303	Ringelmann Number 2 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310.1	Total Suspended Particulate (TSP) Concentration Limits	N	
6-1-401	Appearance of Emissions	N	
SIP			
<b>Regulation 6</b>	Particulate Matter and Visible Emissions (9/4/98)		
6-303	Ringelmann Number 2 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/1995)		
Regulation 9,			
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitation	Y	
BAAQMD	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary		
Regulation 9,	Engines (7/25/07)		
Rule 8			
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	Ν	
9-8-330.2	100 hours for reliability and maintenance	Ν	
9-8-330.3	50 hours for reliability and maintenance	Ν	
40 CFR Part	National Emissions Standards for Hazardous Air Pollutants for Source		
63	Categories, Subpart A – General Provisions		
Subpart A			
63.1	General Applicability of the General Provisions	Y	
63.2	Definitions	Y	
63.3	Units and Abbreviations	Y	
63.4	Prohibited activities and circumvention	Y	
63.6(a)	Compliance with standards and maintenance requirements -	Y	
	Applicability		
63.6(c)	Compliance dates for existing sources	Y	

# Table IV – DSource-specific Applicable RequirementsS-7, NATURAL-GAS FIRED EMERGENCY GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.6(f)(2)	Methods for determining compliance	Y	Dutt
63.6(f)(3)	Finding of compliance	Y	
63.6(g)	Use of an alternative nonopacity emission standard	Y	
63.6(i)	Compliance extension procedures and criteria	Y	
63.6(j)	Presidential compliance exemption	Y	
63.10(a)	Recordkeeping and reporting requirements, applicability and general information	Y	
63.10(b)(1)	Record retention	Y	
63.10(f)	Administrator waiver of recordkeeping or reporting requirements	Y	
63.12	State authority and delegations	Y	
63.13	Addresses of air pollution control agencies and EPA Regional Offices	Y	
63.14	Incorporation by reference	Y	
63.15	Availability of information and confidentiality	Y	
40 CFR Part	National Emissions Standards for Hazardous Air Pollutants for Stationary Paging Statement Combustion Engines (BICE)		
63 Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines (RICE)		
63.6585	Applicability		
63.6585(a)	Applicable to Stationary RICE		
63.6585(c)	Applicable to Area Source of HAPs		
63.6590(a)(1) (iii)	Affected source under stationary RICE located at an area source of HAP emissions, constructed before 6/12/06	Y	
63.6595(a)	Comply with applicable emission limitations and operating limitations by 10/19/13.	Y	
63.6595(c)	Comply with applicable notification requirements in 63.6645 and 40 CFR Part 63, subpart A (Note there are no applicable notification requirements under either of these sections)	Y	
63.6603(a)	<ul> <li>Comply with requirements of Table 2d (operating limitations of Tables 1b and 2b do not apply):</li> <li>1. Change oil &amp; filter every 500 hours of operation or annually, whichever comes first. Oil analysis program may be used to extend period.</li> <li>2. Inspect spark plugs every 1000 hours or annually, whichever comes first, and replace as necessary.</li> <li>3. Inspect all hoses and belts every 500 hours or annually, whichever comes first, and replace as necessary.</li> </ul>	Y	

# Table IV – DSource-specific Applicable RequirementsS-7, NATURAL-GAS FIRED EMERGENCY GENERATOR
### **IV.** Source-specific Applicable Requirements

#### Table IV – D Source-specific Applicable Requirements S-7, NATURAL-GAS FIRED EMERGENCY GENERATOR

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
63.6605	General Requirements	Y	
	1. Must be in compliance with applicable emission limitations and		
	operating limitations		
	2. Operate engine in a manner consistent with safety and good air pollution control practices to minimize emissions.		
63.6625(e)(3)	Maintain RICE and abatement controls according to manufacturer's	Y	
	instructions or develop own plan.		
63.6625(h)	Minimize idling, and minimize startup time to not exceed 30 mintutes.		
63.6640(a)	Demonstrate compliance with the requirements of Table 2d according to	Y	
	work or management practices of Table 6, Part 9a.		
63.6640(b)	Report deviations from the requirements of Table 2d.	Y	
63.6640(e)	Report non-compliance with the any applicable requirement of Table 8.	Y	
63.6640(f)	Comply with requirements of (f)(1)(i) through (iii) below	Y	
63.6640(f)(1)	No time limit when engine is used for emergencies	Y	
(i) 63.6640(f)(1)	Operation of engine for maintenance checks and readiness testing	Y	
		Ĩ	
(ii) 63.6640(f)(1)	limited to 100 hours per year	Y	
(iii)	Operation of engine for non-emergency and not associated with maintenance checks and readiness testing is limited to 50 hours, which	Ĩ	
(111)	is counted towards the 100 hours per year maximum specified in		
	63.6640(f)(1)(ii)		
63.6645(a)(5)	The notification requirements of 63.6645(a) do not apply to this engine.	Y	
63.6655	Record Keeping	Y	
	1. Record hours of operation	_	
	2. Install non-resettable hour meter		
63.6660	Instructions for Records	Y	
63.6670	Implementation and enforcement of Subpart ZZZZ	Y	
BAAQMD			
Condition #			
23112			
Part 1	Hours of Operation (9-8-330)	Ν	
Part 2	Fuel or Hours of Operation Meter (9-8-530)	Ν	
Part 3	Records (9-8-530)	Ν	

### **IV.** Source-specific Applicable Requirements

### Table IV-ESource-specific Applicable RequirementsS-8, COOLING TOWER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter, General Requirements (12/5/07)		
Regulation 6,			
Rule 1			
6-1-301	Ringelmann Number 1 Limitation	Ν	
6-1-305	Visible Particles	Ν	
6-1-310.1	Total Suspended Particulate (TSP) Concentration Limits	Ν	
6-1-310.2	10.2 Total Suspended Particulate (TSP) Concentration Limits Based on Exhaust Gas Rate		7/1/2020
6-1-401	Appearance of Emissions	N	
SIP	Particulate Matter and Visible Emissions (9/4/98)		
<b>Regulation 6</b>			
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Condition			
#16676			
part 52	TDS limit and sampling requirement (CEC Conditions of Certification AQ-52)	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

#### Condition #16676 For All Sources:

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

#### **Definitions:**

Clock Hour:	Any continuous 60-minute period beginning on the hour.
Calendar Day:	Any continuous 24-hour period beginning at 12:00 AM or 0000 hours.
Year:	Any consecutive twelve-month period of time
Heat Input:	All heat inputs refer to the heat input at the higher heating value (HHV) of the fuel, in BTU/scf.
Rolling 3-hour period:	Any three-hour period that begins on the hour and does not include start-up or shutdown periods.
Firing Hours:	Period of time during which fuel is flowing to a unit, measured in
	fifteen minute increments.
MM BTU:	million British thermal units
Gas Turbine Start-up Mode:	The lesser of the first 180 minutes of continuous fuel flow to the Gas
	Turbine after fuel flow is initiated or the period of time from Gas
	Turbine fuel flow initiation until the Gas Turbine achieves two
	consecutive CEM data points in compliance with the emission
	concentration limits of parts 21(b) and 21(d).
Steam Turbine Cold Start-up:	The lesser of the first 360 minutes of continuous fuel flow to the Gas
	Turbine after fuel flow is initiated or the period of time from Gas
	Turbine fuel flow initiation until the Gas Turbine achieves two
	consecutive CEM data points in compliance with the emission
	concentration limits of parts 21(b) and 21(d), following a steam
	turbine shutdown of at least 72 hours.
Gas Turbine Shutdown Mode:	The lesser of the 30-minute period immediately prior to the
	termination of fuel flow to the Gas Turbine or the period of time
	from non-compliance with any requirement listed in Parts 21(a)
	through 21(f) until termination of fuel flow to the Gas Turbine.
Auxiliary Boiler Start-up:	The lesser of the first 120 minutes of continuous fuel flow to an
Auxinary Boner Start-up.	Auxiliary Boiler after fuel flow is initiated; or the period of time
	from fuel flow initiation until the Boiler achieves two consecutive
	CEM data points in compliance with the emission concentration limits of points $28(h)$ and $28(d)$
	limits of parts 28(b) and 28(d).

Auxiliary Boiler Shutdown:	The lesser of the 30 minute period immediately prior the termination of fuel flow to the Auxiliary Boiler; or the period of time from non- compliance with any requirement listed in Parts 28(a) through 28(d) until termination of fuel flow to the auxiliary boiler.
Specified PAHs:	The polycyclic aromatic hydrocarbons listed below shall be considered to 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 <sub>x</sub> , CO, or NH <sub>3</sub> ) corrected to a standard stack gas oxygen concentration. For emission point P-1 (Gas Turbine S-1 and HRSG S-2) and emission point P-2 (Gas Turbine S-3 and HRSG S-4) the standard stack gas oxygen concentration is 15% O <sub>2</sub> by volume on a dry basis. For emission point P-3 (Auxiliary Boiler S-5), the standard stack gas oxygen concentration is 3% O <sub>2</sub> by volume on a dry basis.
Combustor Tuning Activities:	All testing, adjustment, tuning, and calibration activities recommended by the gas turbine manufacturer to insure safe and reliable steady-state operation of the gas turbines following replacement of the combustor. This includes, but is not limited to, adjusting the amount of fuel distributed between the combustion turbine's staged fuel systems to simultaneously minimize NO <sub>x</sub> and CO production while minimizing combustor dynamics and ensuring combustor stability.
Combustor Tuning Period:	The cumulative period, not to exceed 360 minutes, during which combustor tuning activities are taking place
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
1. Deleted Application 1047	0
2. Deleted Application 1047	0

3. Deleted Application 10470

- 4. Deleted Application 10470
- 5. Deleted Application 10470
- 6. Deleted Application 10470
- 7. Deleted Application 10470
- 8. Deleted Application 10470
- 9. Deleted Application 10470
- 10. Deleted Application 10470
- 11. Deleted Application 10470
- 12. Deleted Application 10470
- 13. Deleted Application 10470

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

- 14. The Gas Turbines (S-1 and S-3) and HRSGs (S-2 and S-4) shall be fired exclusively on 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 once per month to determine the sulfur content of the gas. (BACT for SO<sub>2</sub> and PM<sub>10</sub>)
- 15. The combined heat input rate to each power train consisting of a Gas Turbine and its associated HRSG (S-1 & S-2 and S-3 & S-4) shall not exceed 2,225.1 MM BTU per hour, averaged over any rolling 3-hour period. (PSD for NO<sub>x</sub>)
- The combined heat input rate to each power train consisting of a Gas Turbine and its associated HRSG (S-1 & S-2 and S-3 & S-4) shall not exceed 50,738.24 MM BTU per calendar day. (PSD for PM<sub>10</sub>)
- 17. The combined cumulative heat input rate for both Gas Turbines (S-1 and S-3) and both HRSGs (S-2 and S-4) shall not exceed 34,010,400 MM BTU per year. (Offsets)
- 18. The HRSG duct burners shall not be fired unless its associated Gas Turbine is in operation. (BACT for NO<sub>x</sub>, CO, POC)
- 19. The Gas Turbine (S-1) and HRSG (S-2) shall be abated by the properly operated and properly

maintained Oxidizing Catalyst (A-2) and Selective Catalytic Reduction System (A-1), in series. (BACT for  $NO_x$  and CO)

- 20. The Gas Turbine (S-3) and HRSG (S-4) shall be abated by the properly operated and properly maintained Oxidizing Catalyst (A-4) and Selective Catalytic Reduction System (A-3), in series. (BACT for NO<sub>x</sub> and CO)
- 21. The owner/operator of the Gas Turbines (S-1 and S-3) and HRSGs (S-2 and S-4) shall meet all of the requirements listed in (a) through (h) below, except during a Gas Turbine Start-up, a Gas Turbine Shutdown, a steam turbine cold start-up, or a gas turbine combustor tuning period. (BACT, PSD, and Toxic Risk Management Policy)
  - (a) Nitrogen oxide emissions at P-1 (the combined exhaust point for the S-1 Gas Turbine and the S-2 HRSG after control by the A-1 SCR System and A-2 Oxidation Catalyst) shall not exceed 20 pounds per hour, calculated as NO<sub>2</sub>, or 0.009 lbs/MM BTU of natural gas fired. Nitrogen oxide emissions at P-2 (the combined exhaust point for the S-3 Gas Turbine and the S-4 HRSG after control by the A-3 SCR System and A-4 Oxidation Catalyst) shall not exceed 20 pounds per hour, calculated as NO<sub>2</sub>, or 0.009 lbs/MM BTU of natural gas fired. (PSD for NO<sub>x</sub>)
  - (b) The nitrogen oxide concentration at P-1 and P-2 each shall not exceed 2.5 ppmv, corrected to 15% O<sub>2</sub>, on a dry basis, averaged over any 1-hour period. (BACT for NO<sub>x</sub>)
  - (c) Carbon monoxide emissions at P-1 and P-2 each shall not exceed 29.2 pounds per hour, nor 0.0132 lb/MM BTU of natural gas fired. (PSD for CO)
  - (d) The carbon monoxide concentration at P-1 and P-2 each shall not exceed 6 ppmv, corrected to 15% O<sub>2</sub>, on a dry basis, averaged over any rolling 3-hour period. (BACT for CO)
  - \*(e) Ammonia (NH<sub>3</sub>) emissions at P-1 and P-2 each shall not exceed 10 ppmv, corrected to 15% O<sub>2</sub>, on a dry basis, averaged over any rolling 3-hour period. This ammonia emission concentration shall be verified by the continuous records of the ammonia injection rate to A-1 and A-3 SCR Systems. The correlation between the gas turbine and HRSG heat input rates, A-1 and A-3 SCR System ammonia injection rates, and corresponding ammonia emission concentration at emission points P-1 and P-2 shall be determined in accordance with permit part 38. (REGULATION 2, RULE 5 for NH<sub>3</sub>)
  - (f) Precursor organic compound (POC) emissions at P-1 and P-2 each shall not exceed 3.8 pounds per hour, or 0.0017 lb/MM BTU of natural gas fired. (BACT for POC)
  - (g) Sulfur dioxide (SO<sub>2</sub>) mass emissions at P-1 and P-2 each shall not exceed 6.2 pounds per hour or 0.00277 lb/MM BTU of natural gas fired. (BACT for SO<sub>2</sub>)
  - (h) Particulate matter (PM<sub>10</sub>) mass emissions at P-1 and P-2 each shall not exceed 9.0 pounds per hour or 0.0040 lb/MM BTU of natural gas fired. (BACT for PM<sub>10</sub>)
- 22. Deleted Application 10470

23. The pollutant emission rates from each of the Gas Turbines (S-1 and S-3) during a start-up or shutdown or during a gas turbine combustor tuning period shall not exceed the limits established below. (PSD)

	Start-Up <u>(lb/start-up)</u>	Shutdown (lb/shutdown)	Steam Turbine Cold Start-up or Combustor Tuning Period <u>(lb/start-up or lb/period)</u>
(a) Oxides of Nitrogen (as NO <sub>2</sub> )	240	20	600
(b) Carbon Monoxide (CO)	2514	44.1	2514
(c) Precursor Organic Compounds (as CH <sub>4</sub> )	48	8	96

Within three months of the end of the Commissioning period, the owner/operator shall submit a plan designed to minimize emissions during the transient conditions encountered during gas turbine start-ups and shutdowns. This plan shall indicate what steps will be taken to start controlling NO<sub>x</sub> emissions as soon as feasible, including when ammonia can be fed to the SCR system without producing ammonia slip in excess of 10 ppmvd @ 15% O<sub>2</sub>. This plan shall be based upon the experience gathered from the source tests performed per part #13 and actual operating experience gained during the first six-months of operation. This plan shall also be developed in consultation with the manufacturers of the gas turbines, HRSGs, control systems, and air pollution control units. This plan shall be submitted to the CEC CPM for approval. After the plan has been approved, the owner/operator shall use the procedures included in the plan to minimize NO<sub>x</sub> emissions during gas turbine start-ups and shutdowns.

Within 24 months of the end of the Commissioning period, the owner/operator shall submit a report to the District and the CEC CPM that establishes reasonable maximum hourly mass emission rates for start-up and shutdown conditions. The revised mass emission rates shall be based upon source test and continuous emission monitoring data. Pending approval of the District and the CEC CPM, these revised mass emission rates shall be established as new emission limitations that will supersede the limits included in this part.

24. No more than one of the Gas Turbines (S-1 and S-3) shall be in start-up mode, supporting a steam turbine cold start-up, or undergoing combustor tuning at any point in time. The total number of hours during which the Gas Turbines (S-1 and S-3) may be operated to support a steam turbine cold start-up or may undergo combustor tuning shall not exceed 30 hours per year per gas turbine. (PSD)

#### **Conditions for the Auxiliary Boiler (S-5)**

- 25. The Auxiliary Boiler (S-5) shall be fired exclusively on 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-5 shall sample and test the gas from each supply source at least once per month to determine the sulfur content of the gas. (BACT for SO<sub>2</sub> and PM<sub>10</sub>)
- 26. The heat input rate to the Auxiliary Boiler (S-5) shall not exceed 320 million BTU per hour, averaged over any rolling 3-hour period. (Cumulative Increase)
- 27. The cumulative heat input rate to the Auxiliary Boiler (S-5) shall not exceed 480,000 million BTU per year. (Cumulative Increase)
- 28. The owner/operator of the Auxiliary Boiler (S-5) shall meet all of the requirements listed in (a) through (h) below, except during an Auxiliary Boiler Start-up or an Auxiliary Boiler Shutdown. (BACT, PSD)
  - (a) Nitrogen oxide emissions at P-3 (the exhaust point for the Auxiliary Boiler) shall not exceed 3.5 pounds per hour, calculated as NO<sub>2</sub>. (PSD for NO<sub>x</sub>)
  - (b) The nitrogen oxide concentration at P-3 shall not exceed 9.0 ppmv, measured as NO<sub>x</sub>, corrected to 3% O<sub>2</sub>, on a dry basis, averaged over any rolling 3-hour period. (BACT for NO<sub>x</sub>)
  - (c) Carbon monoxide emissions at P-3 shall not exceed 11.8 pounds per hour. (PSD for CO)
  - (d) The carbon monoxide concentration at P-3 shall not exceed 50 ppmv, corrected to 3% O<sub>2</sub>, on a dry basis, averaged over any rolling 3-hour period. (BACT for CO)
  - (e) Precursor organic compound (POC) emissions at P-3 shall not exceed 1.7 pounds per hour. (BACT for POC)
  - (f) Sulfur dioxide (SO<sub>2</sub>) mass emissions at P-3 shall not exceed 0.5 pounds per hour. (BACT for SO<sub>2</sub>)
  - (g) Particulate matter ( $PM_{10}$ ) mass emissions at P-3 shall not exceed 1.6 pounds per hour. (BACT for  $PM_{10}$ )
  - \*(h) Ammonia (NH<sub>3</sub>) emissions at P-3 shall not exceed 10 ppmv, corrected to 3% O<sub>2</sub>, on a dry basis, averaged over any rolling 3-hour period. This ammonia concentration shall be verified by the continuous recording of the ammonia injection rate at the A-5 SCR System. The correlation between the auxiliary boiler heat input rate, A-5 SCR System ammonia injection rate, and corresponding ammonia emission concentration at P-3 shall be determined in accordance with permit part 38. (Regulation 2, Rule 5)

29. The Auxiliary Boiler (S-5), its burners, combustion chamber, and exhaust system shall be designed and constructed so that the boiler can be retrofitted with an oxidizing catalyst in the event the Auxiliary Boiler cannot consistently comply with the emission limitations specified in part 28. S-5 Auxiliary Boiler shall be abated by the properly operating and maintained A-5 Selective Catalytic Reduction System. (BACT for NO<sub>x</sub>, CO)

#### Conditions for All Sources (S-1, S-2, S-3, S-4, and S-5)

- 30. The combined heat input rate to the Gas Turbines (S-1 and S-3), HRSGs (S-2 and S-4), and Auxiliary Boiler (S-5) shall not exceed 109,157 million BTU per calendar day. (PSD, CEC Offsets)
- 31. The cumulative heat input rate to the Gas Turbines (S-1 and S-3), HRSGs (S-2 and S-4), and Auxiliary Boiler (S-5) combined shall not exceed 34,490,400 million BTU per year. (Offsets)
- 32. Total combined emissions from the Gas Turbines, HRSGs, and Auxiliary Boiler (S-1, S-2, S-3, S-4, and S-5), including emissions generated during Gas Turbine Start-ups, Gas Turbine Shutdowns, Auxiliary Boiler Start-ups, and Auxiliary Boiler Shutdowns, shall not exceed the following limits during any calendar day:

(a)	1342 pounds of NO <sub>x</sub> (as NO <sub>2</sub> ) per day	(CEQA)
(b)	6445 pounds of CO per day	(PSD)
(c)	271.3 pounds of POC (as CH <sub>4</sub> ) per day	(CEQA)
(d)	465 pounds of $PM_{10}$ per day	(PSD)
(e)	282.6 pounds of $SO_2$ per day	(BACT)

33. Cumulative emissions from the Gas Turbines, HRSGs, and the Auxiliary Boiler combined (S-1, S-2, S-3, S-4, and S-5), including emissions generated during Gas Turbine Start-ups, Gas Turbine Shutdowns, Auxiliary Boiler Start-ups, and Auxiliary Boiler Shutdowns, shall not exceed the following limits during any consecutive twelve-month period:

(a)	175.7 tons of NO <sub>x</sub> (as NO <sub>2</sub> ) per year	(Offsets, PSD)
(b)	506.4 tons of CO per year	(Cumulative Increase)
(c)	33.9 tons of POC (as CH <sub>4</sub> ) per year	(Offsets)
(d)	69.2 tons of $PM_{10}$ per year	(Offsets, PSD)
(e)	47.11 tons of SO <sub>2</sub> per year	(Cumulative Increase)

- \*34. The maximum projected annual toxic air contaminant emissions from the Gas Turbines, HRSGs, and the Auxiliary Boiler combined (S-1, S-2, S-3, S-4, and S-5) shall not exceed the following limits:
  - (a) 3,817 pounds of formaldehyde per year
  - (b) 460.9 pounds of benzene per year
  - (c) 78.5 pounds of Specified polycyclic aromatic hydrocarbons (PAHs) per year

unless the owner/operator meets the requirements of (d), (e), and (f) below:

- (d) The owner/operator shall perform a health risk assessment using the emission rates determined by source test and the most current Bay Area Air Quality Management District (District) approved procedures and unit risk factors in effect at the time of the analysis. The calculated excess cancer risk shall not exceed 1.0 in one million.
- (e) The owner/operator shall perform a second risk analysis using the emission rates determined by source test and the procedures and unit risk factors in effect when the Determination of Compliance was issued. The calculated excess cancer risk shall not exceed 1.0 in one million.
- (f) Both of these risk analyses shall be submitted to the District and the CEC CPM within 60 days of the source test date. The owner/operator may request that the District and the CEC CPM revise the carcinogenic compound emission limits specified above. If the owner/operator demonstrates to the satisfaction of the APCO that these revised emission limits will satisfy the conditions stated in parts (d) and (e) above, the District and the CEC CPM may, at their discretion, adjust the carcinogenic compound emission limits listed above. The Title V operating permit shall be amended to reflect these adjustments. (Regulation 2, Rule 5)
- 35. The owner/operator shall demonstrate compliance with parts 15 through 18, 21(a) through 21(d), 23, 24, 26, 28(a) through 28(d), 32(a), 32(b), 33(a), and 33(b) by using properly operated and maintained continuous monitors (during all hours of operation including equipment Startup and Shutdown periods and Gas Turbine Combustor Tuning Periods) for all of the following parameters:
  - (a) Firing Hours and Fuel Flow Rates for each of the following sources: S-1 and S-2 combined, S-3 and S-4 combined, and S-5.
  - (b) Oxygen  $(O_2)$  Concentrations, Nitrogen Oxides  $(NO_x)$  Concentrations, and Carbon Monoxide (CO) Concentrations at each of the following exhaust points: P-1, P-2 and P-3.
  - (c) Ammonia injection rate at A-1 and A-3 SCR Systems

The owner/operator shall record all of the above parameters every 15 minutes (excluding normal calibration periods) and shall summarize all of the above parameters for each clock hour. For

each calendar day, the owner/operator shall calculate and record the total Firing Hours, the average hourly Fuel Flow Rates, and pollutant emission concentrations.

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

- (d) Heat Input Rate for each of the following sources: S-1 and S-2 combined, S-3 and S-4 combined, and S-5.
- (e) Corrected  $NO_x$  concentrations,  $NO_x$  mass emissions (as  $NO_2$ ), corrected CO concentrations, and CO mass emissions at each of the following exhaust points: P-1, P-2, and P-3.

For each source, source grouping, or exhaust point, the owner/operator shall record the parameters specified in parts 35(d) and 35(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 associated HRSG combined, the Auxiliary Boiler, and all five sources (S-1, S-2, S-3, S-4, and S-5) combined.
- (h) the average  $NO_x$  mass emissions (as  $NO_2$ ), CO mass emissions, and corrected  $NO_x$  and CO emission concentrations for every clock hour and for every rolling 3-hour period.
- (i) on an hourly basis, the cumulative total NO<sub>x</sub> mass emissions (as NO<sub>2</sub>) and the cumulative total CO mass emissions, for each calendar day for the following: each Gas Turbine and associated HRSG combined, the Auxiliary Boiler, and all five sources (S-1, S-2, S-3, S-4, and S-5) combined.
- (j) For each calendar day, the average hourly Heat Input Rates, Corrected  $NO_x$  emission concentrations,  $NO_x$  mass emissions (as  $NO_2$ ), corrected CO emission concentrations, and CO mass emissions for each Gas Turbine and associated HRSG combined and the Auxiliary Boiler.
- (k) on a daily basis, the cumulative total NO<sub>x</sub> mass emissions (as NO<sub>2</sub>) and cumulative total CO mass emissions, for each calendar year for all five sources (S-1, S-2, S-3, S-4, and S-5) combined.

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

- 36. To demonstrate compliance with parts 23(c), 32(c) through 32(e), and 33(c) through 33(e), the owner/operator shall calculate and record on a daily basis, the Precursor Organic Compound (POC) mass emissions, Fine Particulate Matter (PM<sub>10</sub>) mass emissions (including condensable particulate matter), and Sulfur Dioxide (SO<sub>2</sub>) mass emissions from each power train and the auxiliary boiler. The owner/operator shall use the actual Heat Input Rates calculated pursuant to part 35, actual Gas Turbine Start-up Times, actual Gas Turbine Shutdown Times, actual steam turbine cold start-up times, actual gas turbine combustor tuning times, and CEC and District-approved emission factors to calculate these emissions. The calculated emissions shall be presented as follows:
  - (a) For each calendar day, POC, PM<sub>10</sub>, and SO<sub>2</sub> Emissions shall be summarized for: each power train (Gas Turbine and its respective HRSG combined); the Auxiliary Boiler; and the five sources (S-1, S-2, S-3, S-4, and S-5) combined.
  - (b) on a daily basis, the cumulative total POC, PM<sub>10</sub>, and SO<sub>2</sub> mass emissions, for each year for all five sources (S-1, S-2, S-3, S-4, and S-5) combined.

(Offsets, PSD, Cumulative Increase)

- \*37. To demonstrate compliance with Part 34, the owner/operator shall calculate and record on an annual basis the maximum projected annual emissions of: Formaldehyde, Benzene, and Specified PAH's. Maximum projected annual emissions shall be calculated using the maximum Heat Input Rate of 39,390,400 MM BTU/year and the highest emission factor (pounds of pollutant per MM BTU of Heat Input) determined by any source test at the Gas Turbine, HRSG, or Auxiliary Boiler. (Regulation 2, Rule 5)
- \*38. Within 60 days of start-up of the LMEC, the owner/operator shall conduct a District-approved source test on exhaust point P-1 or P-2 and P-3 to determine the corrected ammonia (NH<sub>3</sub>) emission concentration to determine compliance with part 21(e) and 28(h). The source test shall determine the correlation between the heat input rates of the gas turbine and associated HRSG, A-1 or A-3 SCR System ammonia injection rate, and the corresponding NH<sub>3</sub> emission concentration at emission point P-1 or P-2 and the correlation between the heat input rate of the auxiliary boiler, A-5 SCR System ammonia injection rate, and the corresponding NH<sub>3</sub> emission concentration at emission point P-3. The source test shall be conducted over the expected operating range of the turbine (at a minimum, 60%, 80%, and 100% load) to establish the range of ammonia injection rates necessary to achieve NO<sub>x</sub> emission reductions while maintaining ammonia slip levels. Continuing compliance with part 21(e) shall be demonstrated through calculations of corrected ammonia concentrations based upon the source test correlation and continuous injection (Regulation records of ammonia rate. 2, Rule 5)
- 39. Within 60 days of start-up of the LMEC and on an annual basis thereafter, the owner/operator shall conduct a District-approved source test on exhaust points P-1 and P-2 while each Gas

Turbine and associated Heat Recovery Steam Generator are operating at maximum load to determine compliance with Parts 21(a), (b), (c), (d), (f), (g), & (h) and while each Gas Turbine and associated Heat Recovery Steam Generator are operating at minimum load to determine compliance with Parts 21(c), (d), & (f) and to verify the accuracy of the continuous emission monitors required in part 35. The owner/operator shall test for (as a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic compound concentration and emissions, methane, ethane, and particulate matter ( $PM_{10}$ ) emissions including condensable particulate matter. (BACT, offsets)

- 40. Within 60 days of start-up of the LMEC and on an annual basis thereafter, the owner/operator shall conduct a District approved source test on exhaust point P-3 while the Auxiliary Boiler (S-5) is operating at maximum allowable operating rates to determine compliance with the emission limitations of Part 28(a) through 28(g) and to verify the accuracy of the continuous emission monitors required in part 35. The owner/operator shall test for (as a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic compound concentration and emissions, and particulate matter (PM<sub>10</sub>) emissions including condensable particulate matter. (BACT, offsets)
- 41. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section and the CEC CPM prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements for continuous emission monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section and the CEC CPM in writing of the source test protocols and projected test dates at least 7 days prior to the testing date(s). As indicated above, the Owner/Operator shall measure the contribution of condensable PM (back half) to the total PM<sub>10</sub> emissions. However, the Owner/Operator may propose alternative measuring techniques to measure condensable PM such as the use of a dilution tunnel or other appropriate method used to capture semi-volatile organic compounds. Source test results shall be submitted to the District and the CEC CPM within 60 days of completing the tests. (BACT)
- \*42. Within 60 days of start-up of the LMEC and on an biennial basis (once every two years) thereafter, the owner/operator shall conduct a District-approved source test on exhaust point P-1 or P-2 while the Gas Turbine and associated Heat Recovery Steam Generator are operating at maximum allowable operating rates to demonstrate compliance with Part 34. Unless the requirements of part 42(b) have been met, the owner/operator shall determine the formaldehyde, benzene, and Specified PAH emission rates (in pounds/MM BTU). If any of the above pollutants are not detected (below the analytical detection limit), the emission concentration for that pollutant shall be deemed to be one half (50%) of the detection limit concentration. (Regulation 2, Rule 5)
  - (a) The owner/operator shall calculate the maximum projected annual emission rate for each pollutant by multiplying the pollutant emission rate (in pounds/MM BTU; determined by source testing) by 34,490,400 MM BTU/year.
  - (b) If three consecutive biennial source tests demonstrate that the emission rates calculated

pursuant to part (a) for any of the compounds listed below are less than the annual emission rates shown, then the owner/operator may reduce the frequency of future testing for that pollutant to once every five years.

Benzene	$\leq$	221 pounds/year
Formaldehyde	$\leq$	1,834 pounds/year
Specified PAH's	$\leq$	38 pounds/year

(Regulation 2, Rule 5)

- 43. The owner/operator shall submit all reports (including, but not limited to monthly CEM reports, monitor breakdown reports, emission excess reports, equipment breakdown reports, etc.) as required by District Rules or Regulations and in accordance with all procedures and time limits specified in the Rule, Regulation, Manual of Procedures, or Enforcement Division Policies & Procedures Manual. (Regulation 2-6-502)
- 44. The owner/operator shall maintain all records and reports on site for a minimum of 5 years. These records shall include but are not limited to: continuous monitoring records (firing hours, fuel flows, emissions, monitor excesses, breakdowns, etc.), source test and analytical records, emission calculation records, records of steam turbine cold start-ups and gas turbine combustor tuning, and records of plant upsets and related incidents. The owner/operator shall make all records and reports available to District and the CEC CPM staff upon request. (Regulation 2-6-501)
- 45. The owner/operator 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. Not withstanding 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. (Regulation 2-1-403)
- 46. The stack heights of the emission points P-1 and P-2 shall be at least 150 feet above mean sea level (approximately 138.8 feet above grade level at the stack base). The stack height of the emission point P-3 shall be at least 100.6 feet above mean sea level (approximately 88.6 feet above grade level at the stack base). (PSD, Regulation 2, Rule 5)
- 47. The Owner/Operator of LMEC shall maintain 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 Manual of Procedures, Volume IV, Source Test Policy and Procedures, and shall be subject to BAAQMD review and approval. (Regulation 1-501)
- 48. Deleted Application 10470.

- 49. Deleted Application 10470.
- 50. Deleted Application 10470.
- 51. Deleted Application 10470.

52. The cooling towers shall be properly installed and maintained to minimize drift losses. The cooling towers shall be equipped with high efficiency mist eliminators with a minimum guarantee drift rate of 0.0005%. The maximum total dissolved solids (TDS) sampled at the base of the cooling tower or at the point of return to the wastewater facility shall not be higher than 3765 mg/l. The owner/operator shall sample the water at least once a day. (Basis: CEC Conditions of Certification AQ-52)

- 53. Deleted August, 2001.
- 54. The Owner/Operator shall submit a Preplanned Abatement Strategy as described in BAAQMD Regulation 4, Air Pollution Episode Plan, within 120 days after issuance of the Title V permit. After the plan has been approved by the APCO, the owner/operator shall keep records of implementation on an event basis. (Basis: BAAQMD Regulation 4)
- 55. To demonstrate compliance with part 24, the owner/operator shall record the start time, end time, and duration of each steam turbine cold start-up and each gas turbine combustor tuning period. On an annual basis, the owner/operator shall submit a report to the District and the CEC CPM describing the total number of hours during which each turbine was operated in support of a steam turbine cold start-up or combustor tuning mode during the year. (PSD)

#### Condition #22851 for: S-6 Fire Pump Diesel Engine COND# 22851

1. Operating for reliability-related activities is limited to no more than 34 hours per year per engine which is the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25. This emergency fire pump is subject to the current National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems."

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations]

2. The owner or 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)(B)(3)]

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 Districtapproved 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 or 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 structure, playground, 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)]

#### Condition #23112 For S-7, Natural-Gas Fired Emergency Generator

1. The owner or operator shall operate the stationary emergency standby engine, only to mitigate emergency conditions or for reliability-related activities (maintenance and testing). Operating while mitigating emergency conditions and while emission testing to show compliance with this part is unlimited. Operating for reliability-related activities are limited to 50 hours per year. (Basis: Emergency Standby Engines, Hours of Operation

Regulation 9-8-330)

2. The owner/operator shall equip the emergency standby engine(s) with a non-resettable totalizing meter that measures hours of operation or fuel usage.

(Basis: Emergency Standby Engines, Monitoring and Recordkeeping 9-8-530)

- 3. Records: The owner/operator shall maintain the following monthly records in a Districtapproved 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 (maintenance and testing)
  - b. Hour of operation for emission testing
  - c. Hours of operation (emergency)
  - d. For each emergency, the nature of the emergency condition
  - e. Fuel usage for engine

(Basis: Emergency Standby Engines, Monitoring and Recordkeeping 9-8-530)

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

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
NOx	BAAQMD	N		125 ppm	BAAQMD	С	CEM
	9-3-303				1-520.1		
	BAAQMD	N		0.15 lb/MW-hr or 5 ppmv	BAAQMD	С	CEM
	9-9-301.2				9-9-501		
NOx	SIP	Y		9 ppmv @ 15% O2, dry	BAAQMD	С	CEM
	9-9-301.3				9-9-501		
	NSPS	Y		0.2 lb/MMBtu	40 CFR	С	CEM
	40 CFR				60.48Da(j)		
	60.44Da						
	(a)(1)						
NOx	NSPS	Y		1.6 lb/MW-hr	40 CFR	С	CEM
	40 CFR			(rolling 24-hr average)	60.48Da(k),		
	60.44Da						
	(d)(1)						
	NSPS, 40	Y		75 ppmv, @ 15% O <sub>2</sub> , dry	40 CFR	С	CEM
	CFR 60.332			4-hr average	60.334(c) and		
	(a)(1)				BAAQMD		
					Condition		
					16676, Part		
					35b		
		Y		None	40 CFR 75.10	С	CEM

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
NOx	BAAQMD	Y		20 lb/hr, for each turbine	BAAQMD	С	CEM
	condition			and HRSG combined,	condition		
	#16676,			except during turbine	#16676,		
	part 21a			startup, shutdown, steam	part 35b		
				turbine cold start-up, or			
				combustor tuning period			
NOx	BAAQMD	Y		20 lb/hr, for each turbine	BAAQMD	P/A	Source test
	condition			and HRSG combined,	condition		at maximum
	#16676,			except during turbine	#16676,		load
	part 21a			startup, shutdown, steam	part 39		
				turbine cold start-up, or			
				combustor tuning period			
	BAAQMD	Y		0.009 lb/MM BTU, for each	BAAQMD	С	CEM
	condition			turbine and HRSG	condition		
	#16676,			combined, except during	#16676,		
	part 21a			turbine startup, shutdown,	part 35b		
				steam turbine cold start-up,			
				or combustor tuning period			
	BAAQMD	Y		0.009 lb/MM BTU, for each	BAAQMD	P/A	Source test
	condition			turbine and HRSG	condition		at maximum
	#16676,			combined, except during	#16676,		load
	part 21a			turbine startup, shutdown,	part 39		
				steam turbine cold start-up,			
				or combustor tuning period			
	BAAQMD	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry,	BAAQMD	С	CEM
	condition			for each turbine and HRSG	condition		
	#16676,			combined, 1-hr average	#16676,		
	part 21b			except during turbine	part 35b		
				startup, shutdown, steam			
				turbine cold start-up, or			
				combustor tuning period			

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD	Y	2.000	2.5 ppmv, @ 15% O <sub>2</sub> , dry,	BAAQMD	P/A	Source test
	condition			for each turbine and HRSG	condition		at maximum
	#16676,			combined, 1-hr average	#16676,		load
	part 21b			except during turbine	part 39		
				startup, shutdown, steam	-		
				turbine cold start-up, or			
				combustor tuning period			
NOx	BAAQMD	Y		240 lb/turbine during	BAAQMD	P/D	Records,
	condition			start-up	condition		calculations
	#16676,				#16676,		
	part 23(a)				part 36		
	BAAQMD	Y		20 lb/turbine during	BAAQMD	P/D	Records,
	condition			shutdown	condition		calculations
	#16676,				#16676,		
	part 23(a)				part 36		
	BAAQMD	Y		600 lb/turbine during steam	BAAQMD	P/D	Records,
	condition			turbine cold start-up or	condition		calculations
	#16676,			combustor tuning period	#16676,		
	part 23(a)				part 36		
NOx	BAAQMD	Y		1342 lb/day for turbines,	BAAQMD	С	CEM
	condition			HRSGs, and boiler	condition		
	#16676,			combined	#16676,		
	part 32a				part 35b		
	BAAQMD	Y		175.7 ton/yr for turbines,	BAAQMD	С	CEM
	condition			HRSGs, and boiler	condition		
	#16676,			combined (includes	#16676,		
	part 33a			emissions from	part 35b		
				commissioning period)			

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
СО	BAAQMD	Y		29.2 lb/hr, for each turbine	BAAQMD	С	CEM
	condition			and HRSG combined,	condition		
	#16676,			except during turbine	#16676,		
	part 21c			startup, shutdown, steam	part 35b		
				turbine cold start-up, or			
				combustor tuning period			
СО	BAAQMD	Y		29.2 lb/hr, for each turbine	BAAQMD	P/A	Source test
	condition			and HRSG combined,	condition		at maximum
	#16676,			except during turbine	#16676,		and
	part 21c			startup, shutdown, steam	part 39		minimum
				turbine cold start-up, or			load
				combustor tuning period			
	BAAQMD	Y		0.0132 lb/MM BTU, for	BAAQMD	С	CEM
	condition			each turbine and HRSG	condition		
	#16676,			combined, except during	#16676,		
	part 21c			turbine startup, shutdown,	part 35b		
				steam turbine cold start-up,			
				or combustor tuning period			
	BAAQMD	Y		0.0132 lb/MM BTU, for	BAAQMD	P/A	Source test
	condition			each turbine and HRSG	condition		at maximum
	#16676,			combined, except during	#16676,		and
	part 21c			turbine startup, shutdown,	part 39		minimum
				steam turbine cold start-up,			load
				or combustor tuning period			
CO	BAAQMD	Y		6 ppmv, @ 15% O <sub>2</sub> , dry, for	BAAQMD	С	CEM
	condition			each turbine and HRSG	condition		
	#16676,			combined, 3-hr average	#16676,		
	part 21d			except during turbine	part 35b		
				startup, shutdown, steam			
				turbine cold start-up, or			
				combustor tuning period			

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 #16676, part 21d BAAQMD	Y		6 ppmv, @ 15% O <sub>2</sub> , dry, for each turbine and HRSG combined, 3-hr average except during turbine startup, shutdown, steam turbine cold start-up, or combustor tuning period 2514 lb/turbine during start-	BAAQMD condition #16676, part 39 BAAQMD	P/A P/D	Source test at maximum and minimum load Records,
	condition #16676, part 23(b)			up, steam turbine cold start- up, or combustor tuning period	condition #16676, part 36		calculations
СО	BAAQMD condition #16676, part 23(b)	Y		44.1 lb/turbine during shutdown	BAAQMD condition #16676, part 36	P/D	Records, calculations
	BAAQMD condition #16676, part 32b	Y		6445 lb/day for turbines, HRSGs, and boiler combined	BAAQMD condition #16676, part 35b	С	CEM
СО	BAAQMD condition #16676, part 33b	Y		506.4 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #16676, part 35b	С	СЕМ
CO <sub>2</sub>		Y		None	40 CFR 75.10	С	fuel flow monitor and CO <sub>2</sub> calculation
SO <sub>2</sub>	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		Ν	

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO <sub>2</sub>	NSPS 40 CFR 60.43Da (b)(2)			0.2 lb/MM BTU, 24 hr average except during startup, shutdown		N	
SO <sub>2</sub>	NSPS 40 CFR 60.333	Y		0.015% (vol) @15% O <sub>2</sub> (dry) or total sulfur content of fuel less than or equal to 0.8% sulfur by weight (8,000 ppmw)	NSPS 40 CFR 60.334(h)(3) (ii) and BAAQMD Condition 16676, Part 14	P/M	Monthly fuel sulfur analysis
		Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measure- ments, calculations
	BAAQMD condition #16676, part 14	Y		Fuel sulfur content of 1 gr/100 scf	BAAQMD condition #16676, part 14	P/M	Fuel testing
	BAAQMD condition #16676, part 21g	Y		6.2 lb/hr, for turbine and HRSG combined	BAAQMD condition #16676, part 39	P/A	Source test at maximum and minimum load
SO <sub>2</sub>	BAAQMD condition #16676, part 21g	Y		0.00277 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #16676, part 39	P/A	Source test at maximum and minimum load

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO <sub>2</sub>	BAAQMD	Y		282.6 lb/day for turbines,	BAAQMD	P/D	Records,
	condition			HRSGs, and boiler	condition		calculations
	#16676,			combined	#16676,		
	part 32e				part 36		
	BAAQMD	Y		47.11 ton/yr for turbines,	BAAQMD	P/D	Records,
	condition			HRSGs, and boiler	condition		calculations
	#16676,			combined (includes	#16676,		
	part 33e			emissions from	part 36		
				commissioning period)			
Opacity	BAAQMD	Ν		> Ringelmann No. 1 for no		Ν	
	6-1-301			more than 3 minutes in any			
				hour			
Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no		Ν	
				more than 3 minutes in any			
				hour			
Opacity	NSPS	Y		20% Opacity (6 min avg.)	40 CFR	Ν	
	40 CFR			with one 6 min avg. at less	60.49Da(a)		
	60.42Da(b)			than 27% Opacity	$(3)^2$		
TSP	BAAQMD	Ν		0.15 grain/dscf	BAAQMD 6-	P/A	Source test
	6-1-310.1				1-504		
TSP	SIP 6-310	Y		0.15 grain/dscf		Ν	
TSP	BAAQMD	Ν		0.15 grain/dscf	BAAQMD 6-	P/A	Source test
	6-1-310.3			@ 6% O <sub>2</sub>	1-504		
	SIP6-310.3	Y		0.15 grain/dscf		Ν	
				@ 6% O <sub>2</sub>			
PM	NSPS	Y		0.03 lb/MMBtu of PM		Ν	
	40 CFR						
	60.42Da						
	(a)(1)						

 $<sup>^{2}</sup>$  The EPA has promulgated changes to Subpart Da in direct final rule action (Federal Register, January 20, 2011) allowing the permitting authority to exempt owners/operators of affected facilities burning only natural gas from the opacity monitoring requirements contained in 60.49Da(a)(3). The District is exempting the facility from the opacity monitoring requirement contained in 60.49Da(a)(3).

Type of	Citation of	FE	Future Effective	T	Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
PM	NSPS	Y		< 20% opacity, 6 minute		Ν	
	40 CFR			average, except one six			
	60.42Da(b)			minute period/hr up to 27%			
				opacity		<b></b>	<b>G 1 1 1</b>
PM10	BAAQMD	Y		9.0 lb/hr, for each turbine	BAAQMD	P/A	Source test
	condition			and HRSG combined	condition		at maximum
	#16676,				#16676,		and
	part 21h				part 39		minimum
							load
PM10	BAAQMD	Y		0.0040 lb/MMBTU, for	BAAQMD	P/A	Source test
	condition			each turbine and HRSG	condition		at maximum
	#16676,			combined	#16676,		and
	part 21h				part 39		minimum
							load
	BAAQMD	Y		465 lb/day for turbines,	BAAQMD	P/D	Records,
	condition			HRSGs, and boiler	condition		calculations
	#16676,			combined	#16676,		
	part 32d				part 36		
$PM_{10}$	BAAQMD	Y		69.2 ton/yr for turbines,	BAAQMD	P/D	Records,
	condition			HRSGs, and boiler	condition		calculations
	#16676,			combined (includes	#16676,		
	part 33d			emissions from	part 36		
				commissioning period)			
POC	BAAQMD	Y		3.8 lb/hr (as CH4) for each	BAAQMD	P/A	Source test
	condition			turbine, and HRSG	condition		at maximum
	#16676,			combined except during	#16676,		and
	part 21f			turbine startup, shutdown,	part 39		minimum
				steam turbine cold start-up,			load
				or combustor tuning period			

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
POC	BAAQMD	Y		0.0017 lb/MM BTU (as	BAAQMD	P/A	Source test
	condition			CH4) for each turbine, and	condition		at maximum
	#16676,			HRSG combined except	#16676,		and
	part 21f			during turbine startup,	part 39		minimum
				shutdown, steam turbine			load
				cold start-up, or combustor			
				tuning period			
	BAAQMD	Y		48 lb/turbine during	BAAQMD	P/D	Records,
	condition			start-up	condition		calculations
	#16676,				#16676,		
	part 23(c)				part 36		
POC	BAAQMD	Y		8 lb/turbine during	BAAQMD	P/D	Records,
	condition			shutdown	condition		calculations
	#16676,				#16676,		
	part 23(c)				part 36		
	BAAQMD	Y		96 lb/turbine during	BAAQMD	P/D	Records,
	condition			steam turbine cold start-up	condition		calculations
	#16676,			or combustor tuning period	#16676,		
	part 23(c)				part 36		
	BAAQMD	Y		271.3 lb/day (as CH4) for	BAAQMD	P/D	Records,
	condition			turbines, HRSGs, and boiler	condition		calculations
	#16676,			combined	#16676,		
	part 32c				part 36		
POC	BAAQMD	Y		33.9 ton/yr for turbines,	BAAQMD	P/D	Records,
	condition			HRSGs, and boiler	condition		calculations
	#16676,			combined (includes	#16676,		
	part 33c			emissions from	part 36		
				commissioning period)			
NH <sub>3</sub>	BAAQMD	Ν		10 ppmv, @ 15% O <sub>2</sub> , dry,	BAAQMD	С	Ammonia
	condition			averaged over 3 hrs for	condition		injection
	#16676,			each turbine and HRSG	#16676,		rate monitor
	Part 21e			combined except during	part 35c		
				turbine startup or shutdown			

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NH3	BAAQMD condition #16676, Part 21e	N		10 ppmv, @ 15% O <sub>2</sub> , dry, averaged over 3 hrs for each turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #16676, part 21e	С	Ammonia injection rate monitor
Formal- dehyde	BAAQMD condition #16676, part 34a	N		3817 lb/yr for turbines, HRSGs, and boiler combined	BAAQMD condition #16676, part 36	P/D	Records, calculations
	BAAQMD condition #16676, part 34a	N		3817 lb/yr for turbines, HRSGs, and boiler combined	BAAQMD condition #16676, part 42	P/every two years on P-1 or P-2	Source test
Benzene	BAAQMD condition #16676, part 34a	N		460.9 lb/yr for turbines, HRSGs, and boiler combined	BAAQMD condition #16676, part 36	P/D	Records, calculations
	BAAQMD condition #16676, part 34a	N		460.9 lb/yr for turbines, HRSGs, and boiler combined	BAAQMD condition #16676, part 42	P/every two years on P-1 or P-2	Source test
Specified PAH's	BAAQMD condition #16676, Part 34c	N		78.5 lb/yr for turbines, HRSGs, and boiler combined	BAAQMD condition #16676, part 36	P/D	Records, calculations
	BAAQMD condition #16676, Part 34c	N		78.5 lb/yr for turbines, HRSGs, and boiler combined	BAAQMD condition #16676, part 42	P/every two years on P-1 or P-2	Source test
Heat input limit	BAAQMD condition #16676, part 15	Y		2,225.1 MM BTU/hr, 3-hr average for each Turbine and HRSG, total	BAAQMD condition #16676, part 35a	С	Fuel meter, firing monitor, calculations

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Heat	BAAQMD	Y		50,738.24 MM	BAAQMD	C	fuel meter,
Input	condition			BTU/calendar day, for each	condition	-	firing
Limit	#16676,			Turbine and	#16676,		monitor,
	part 16			HRSG, total	part 35a		calculations
	BAAQMD	Y		34,010,400 MM BTU/yr for	BAAQMD	С	fuel meter,
	condition			S-1, S-3, Turbines and S-2,	condition		firing
	#16676,			S-4, HRSGs combined	#16676,		monitor,
	part 17				part 35a		calculations
Heat input	BAAQMD	Y		109,157 MM BTU/day, for	BAAQMD	С	Fuel meters
limit	condition			turbines, HRSGs, and boiler	condition		
	#16676,			combined	#16676,		
	part 30				part 35a		
	BAAQMD	Y		34,490,400 MM BTU/yr for	BAAQMD	С	Fuel meters
	condition			turbines, HRSGs, and boiler	condition		
	#16676,			combined	#16676,		
	part 31				part 35a		
Steam	BAAQMD	Y		30 hours per year per	BAAQMD	P/H	records
turbine	condition			turbine	condition		
cold start-	#16676,				#16676,		
up or	part 24				part 55		
combus-							
tor tuning							

Turne	C'hatian af	EE	Future		Monitoring	Monitoring	Maritania
Type of	Citation of	FE Y/N	Effective Date	T imit	Requirement Citation	Frequency	Monitoring
Limit	Limit		Date	Limit		(P/C/N)	Туре
NO <sub>x</sub>	BAAQMD	Ν		125 ppm	BAAQMD	С	CEM
	9-3-303				1-520.1		
	BAAQMD	Ν		30 ppmv @3%O <sub>2</sub> , dry	BAAQMD	С	CEM
	9-7-301.1				1-520.1		
	SIP 9-7-	Y		30 ppmv @3%O2, dry	BAAQMD	С	CEM
	301.1				1-520.1		
NO <sub>x</sub>	NSPS	Y		0.2 lb/MM BTU, 30-	NSPS 40 CFR	С	CEM
	40 CFR			day rolling average in	60.48b(b) and		
	60.44b			NSPS, 24 averaging	Condition No.		
	(a)(4)			period per BAAQMD	16676 Part 35b		
				Regulation 10, part 4)			
	BAAQMD	Y		3.5 lb/hr except during	BAAQMD	С	CEM
	condition			startup or shutdown	condition		
	#16676,				#16676,		
	part 28a				part 35b		
	BAAQMD	Y		9.0 ppmv @ 3% O2, 3-	BAAQMD	С	CEM
	condition			hr average	condition		
	#16676,				#16676,		
	part 28b				part 35b		
NO <sub>x</sub>	BAAQMD	Y		1342 lb/day for	BAAQMD	С	CEM
	condition			turbines, HRSGs, and	condition		
	#16676,			boiler combined	#16676,		
	part 32a				part 35b		
NO <sub>x</sub>	BAAQMD	Y		175.7 ton/yr for	BAAQMD	С	CEM
	condition			turbines, HRSGs, and	condition		
	#16676,			boiler combined	#16676,		
	part 33a			(includes emissions	part 35b		
				from commissioning			
				period)			
CO	BAAQMD	Ν		400 ppmv @ 3% O <sub>2</sub> ,	BAAQMD	С	CEM
	9-7-301.4			dry	condition		
					#16676, part		
					35(b)		

### Table VII - B Applicable Limits and Compliance Monitoring Requirements S-5, AUXILIARY BOILER

### Table VII - B Applicable Limits and Compliance Monitoring Requirements S-5, AUXILIARY BOILER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
СО	SIP 9-7-	Y		400 ppmv @ 3% O <sub>2</sub> ,	BAAQMD	С	CEM
	301.2			dry	condition		
					#16676, part		
					35(b)		
	BAAQMD			11.8 lb/hr except	BAAQMD	С	CEM
	condition			during startup or	condition		
	#16676,			shutdown	#16676,		
	part 28c				part 35b		
	BAAQMD			50 ppmv @ 3% O <sub>2</sub> , 3-	BAAQMD	С	CEM
	condition			hr average	condition		
	#16676,				#16676,		
	part 28d				part 35b		
	BAAQMD	Y		6445 lb/day for	BAAQMD	С	CEM
	condition			turbines, HRSGs, and	condition		
	#16676,			boiler combined	#16676,		
	part 32b				part 35b		
СО	BAAQMD	Y		506.4 ton/yr for	BAAQMD	С	CEM
	condition			turbines, HRSGs, and	condition		
	#16676,			boiler combined	#16676,		
	part 33b			(includes emissions	part 35b		
				from commissioning			
		\$7		period)		N	
$SO_2$	BAAQMD	Y		$GLC^1$ of 0.5 ppm for 3		Ν	
	9-1-301			min or 0.25 ppm for			
				60 min or 0.05 ppm for 24 hours			
50		V				N	
$SO_2$	BAAQMD 9-1-302	Y		300 ppm (dry)		Ν	
SO <sub>2</sub>	BAAQMD	Y		Fuel sulfur content of	BAAQMD	P/M	Fuel testing
302	condition	1		1 gr/100 scf	condition	1 / 101	Fuel testing
	#16676,			1 gi/100 set	#16676, part		
	part 25				#10070, part 25		
	BAAQMD	Y		0.5 lb/hr	BAAQMD	P/A	Source test at
	condition			0.5 10/11	condition	1/11	maximum load
	#16676,				#16676,		
	part 28f				part 40		

### Table VII - B Applicable Limits and Compliance Monitoring Requirements S-5, AUXILIARY BOILER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO <sub>2</sub>	BAAQMD condition #16676, part 32e	Y		282.6 lb/day for turbines, HRSGs, and boiler combined	BAAQMD condition #16676, part 36	P/D	Records, calculations
	BAAQMD condition #16676, part 33e	Y		47.11 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning	BAAQMD condition #16676, part 36	P/D	Records, calculations
Opacity	BAAQMD 6-1-301	N		period) > Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	SIP 6-301	Y		<ul> <li>&gt; Ringelmann No. 1</li> <li>for no more than 3</li> <li>minutes in any hour</li> </ul>		Ν	
Opacity	BAAQMD 6-1-304	N		During tube cleaning, Ringelmann No. 2 for 3 min/hr and 6 min/billion btu/24 hours		N	
Opacity	SIP 6-304	Y		During tube cleaning, Ringelmann No. 2 for 3 min/hr and 6 min/billion btu/24 hours		N	
TSP	BAAQMD 6-1-310.1	N		0.15 grain/dscf		Ν	
TSP	SIP 6-310	Y		0.15 grain/dscf		N	
TSP	BAAQMD 6-1-310.3	N		0.15 grain/dscf @ 6% O2		N	
TSP	SIP 6- 310.3	Y		0.15 grain/dscf @ 6% O <sub>2</sub>		Ν	

### Table VII - B Applicable Limits and Compliance Monitoring Requirements S-5, AUXILIARY BOILER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
$PM_{10}$	BAAQMD	Y		1.6 lb/hr	BAAQMD	P/A	Source test at
	condition				condition		maximum load
	#16676,				#16676,		
	part 28g				part 40		
$PM_{10}$	BAAQMD	Y		465 lb/day for	BAAQMD	P/D	Records,
	condition			turbines, HRSGs, and	condition		calculations
	#16676,			boiler combined	#16676,		
	part 32d				part 36		
	BAAQMD	Y		69.2 ton/yr for	BAAQMD	P/D	Records,
	condition			turbines, HRSGs, and	condition		calculations
	#16676,			boiler combined	#16676,		
	part 33d			(includes emissions from commissioning	part 36		
				period)			
POC	BAAQMD	Y		1.7 lb/hr (as CH4)	BAAQMD	P/A	Source test
100	condition				condition	1,11	Source test
	#16676,				#16676,		
	part 28e				part 40		
POC	BAAQMD	Y		271.3 lb/day (as CH4)	BAAQMD	P/D	Records,
	condition			for turbines, HRSGs,	condition		calculations
	#16676,			and boiler combined	#16676,		
	part 32c				part 36		
POC	BAAQMD	Y		33.9 ton/yr for	BAAQMD	P/D	Records,
	condition			turbines, HRSGs, and	condition		calculations
	#16676,			boiler combined	#16676,		
	part 33c			(includes emissions	part 36		
				from commissioning			
				period)			
NH <sub>3</sub>	BAAQMD	Ν		10 ppmv, @ 3% O <sub>2</sub> ,	BAAQMD	С	Records of
	condition			dry, averaged over 3	condition		ammonia
	#16676,			hrs	#16676,		injection rate
	Part 28h				part 28h		
Heat input	BAAQMD	Y		320 MM BTU/hr,	BAAQMD	С	fuel meter,
limits	condition			3-hr average	condition		firing monitor,
	#16676,				#16676,		calculations
	part 26				part 35a		

### Table VII - B Applicable Limits and Compliance Monitoring Requirements S-5, AUXILIARY BOILER

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
	BAAQMD	Y		480,000 MM BTU/yr	BAAQMD	С	Fuel meters
	condition				condition		
	#16676,				#16676,		
	part 27				part 35a		
Heat input	BAAQMD			109,157 MM	BAAQMD	С	Fuel meters
limits	condition			BTU/day for turbines,	condition		
	#16676,			HRSGs, and boiler	#16676,		
	part 30			combined	part 35a		
	BAAQMD	Y		34,490,400 MM	BAAQMD	С	Fuel meters
	condition			BTU/yr for turbines,	condition		
	#16676,			HRSGs, and boiler	#16676,		
	part 31			combined	part 35a		

Type of	Citation	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	Ν		> Ringelmann No. 2 for no		Ν	
	6-1-303.1			more than 3 minutes in any			
				hour			
Opacity	SIP	Y		Ringelmann 2.0 for 3		Ν	
	Regulation			minutes in any hour			
	6-303.1						
FP	BAAQMD	Ν		0.15 grain/dscf		Ν	
	6-1-310						
FP	SIP	Y		0.15 gr/dscf		Ν	
	Regulation						
	6-310						
SO <sub>2</sub>	BAAQMD	Y		Property Line Ground	None	Ν	N/A
	9-1-301			Level Limits:			
				$\leq$ 0.5 ppm for 3 minutes			
				and $\leq 0.25$ ppm for 60 min.			
				and $\leq 0.05$ ppm for 24 hours			
$SO_2$	BAAQMD	Y		Fuel Sulfur Limit	BAAQMD	P/E	Vendor
	9-1-304			0.5%	Condition #		Certification
					19498,		
					Parts 5 and 8		
Reliability	BAAQMD	Ν			9-8-502	P/E	Totalizing
Related	9-8-330			50 hours			meter record
Hours							keeping
Reliability-	BAAQMD	Ν		34 hours per calendar year	BAAQMD	P/E	Totalizing
related	Condition				Condition		meter,
activities	#22851,				#22851,		record-
	part 1				part 3, 4		keeping

### Table VII – C Applicable Limits and Compliance Monitoring Requirements S-6, FIRE PUMP DIESEL ENGINE

Transf	Clatter	EE	Future		Monitoring	Monitoring	M
Type of	Citation	FE	Effective	T * *4	Requirement	Frequency	Monitoring
Limit	of Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Opacity	BAAQMD	Ν		< Ringelmann No. 2, except		Ν	
	6-1-303.1			for no more than 3 minutes			
				in any hour			
Opacity	SIP	Y		< Ringelmann No. 2, except		Ν	
	Regulation			for no more than 3 minutes			
	6-303.1			in any hour			
TSP	BAAQMD	Ν		0.15 grain/dscf		Ν	
	6-1-310.1						
TSP	SIP	Y		0.15 gr/dscf		Ν	
	Regulation						
	6-310						
SO <sub>2</sub>	BAAQMD	Y		Property Line Ground		Ν	
	Regulation			Level Limits:			
	9-1-301			$\leq$ 0.5 ppm for 3 minutes			
				and $\leq 0.25$ ppm for 60 min.			
				and $\leq 0.05$ ppm for 24 hours			
Reliability	BAAQMD	Ν			9-8-502	P/E	Totalizing
Related	9-8-330			50 hours			meter record
Hours							keeping
Reliability-	BAAQMD	Y		100 hours per calendar year	BAAQMD	P/E	Record-
related	Condition				Condition		keeping
activities	#23112,				#23112,		
	part 1				part 2 and 3		

### Table VII – D Applicable Limits and Compliance Monitoring Requirements S-7, NATURAL GAS FIRED EMERGENCY GENERATOR
# VII. Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD	Ν		$\geq$ Ringelmann No. 1 for no		Ν	
	6-1-301			more than 3 minutes in any			
				hour			
Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		Ν	
TSP	BAAQMD 6-1-310.1	N		0.15 grain/dscf		Ν	
TSP	SIP 6-310	Y		0.15 grain/dscf		Ν	
TSP	BAAQMD 6-1-310.2	N		0.0100 grain/dscf		N	
TDS	BAAQMD Condition #16676, part 52	N		3765 mg/L	BAAQMD Condition #16676, part 5	P/D	Sampling

# Table VII – E Applicable Limits and Compliance Monitoring Requirements S-8, COOLING TOWER

# VIII. TEST METHODS

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

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible
6-1-301		Emissions, or EPA Method 9
BAAQMD	Tube Cleaning	Manual of Procedures, Volume I, Evaluation of Visible
6-1-304		Emissions, or EPA Method 9
BAAQMD	Total Suspended Particulate	Manual of Procedures, Volume IV, ST-15, Particulates Sampling,
6-1-310	(TSP) Concentration Limits	or EPA Method 5, or EPA Method 201A, Determination of PM10
		Emissions, plus EPA Method 202, Determination of Condensable
		Particulate Emissions from Stationary Sources
BAAQMD	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,
9-1-302		Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated
		Sample
BAAQMD	New or Modified Heat Transfer	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
9-3-303	Operation Limits	Continuous Sampling, or ARB Method 100, Procedures for
		Continuous Gaseous Emission Stack Sampling
BAAQMD	Performance Standard, NO <sub>x</sub> ,	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
9-7-301.1	Gaseous Fuel	Continuous Sampling and ST-14, Oxygen, Continuous Sampling,
		or ARB Method 100, Procedures for Continuous Gaseous
		Emission Stack Sampling
BAAQMD	Performance Standard, CO,	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,
9-7-301.2	Gaseous Fuel	Continuous Sampling and ST-14, Oxygen, Continuous Sampling,
		or ARB Method 100, Procedures for Continuous Gaseous
		Emission Stack Sampling
BAAQMD	Emission Limits- Turbines Rated	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
9-9-301.3	$\geq 10 \text{ MW w/SCR}$	Continuous Sampling and ST-14, Oxygen, Continuous Sampling,
		or ARB Method 100, Procedures for Continuous Gaseous
		Emission Stack Sampling

#### Table VIII Test Methods

# VIII. Test Methods

Table VIII
<b>Test Methods</b>

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
NSPS		
Subpart Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978	
60.42Da (a)(1)	Particulate Limit	EPA Method 5, Determination of Particulate Emissions from Stationary Sources
60.42Da (b)	Opacity Limit	EPA Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
60.43Da (b)(2)	SO <sub>2</sub> limit	EPA Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
60.44Da (a)(1)	NO <sub>x</sub> limit	EPA Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
Subpart Db	Standards of Performance for Industrial-Commercial- Institutional Steam Generating Units	
60.44b (a)(4)	NO <sub>x</sub> Limit	EPA Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
Subpart GG	Standards of Performance for Stationary Gas Turbines	
60.332 (a)(1)	Performance Standard, NO <sub>x</sub>	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (a)	SO <sub>2</sub> Volumetric Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (b)	Fuel Sulfur Limit (gaseous fuel)	ASTM D 1072-80, Standard Method for Total Sulfur in Fuel Gases ASTM D 3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation

# VIII. Test Methods

# Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Condition #16676		
Part 21g	SOx Limit	Test Procedure, MOP Vol.4, ST-19A, Sulfur Dioxide, Continuous Sampling
Part 21b	NOx Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 21e	NH3 Limit	BAAQMD Test Procedure ST-1B, Ammonia, Integrated Sampling
Part 21d	CO Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 21f	POC Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 21h	PM10 Limit	EPA Method 5, or EPA Method 201A, Determination of PM10 Emissions, plus EPA Method 202, Determination of Condensable Particulate Emissions from Stationary Sources
Part 34	Formaldehyde Limit	ARB Method 430, Determination of Formaldehyde and Acetaldehyde in Emissions from Stationary Sources
Part 34	Benzene Limit	ARB Method 410A, Determination of Benzene from Stationary Sources (Low Concentration Gas Chromatographic Technique), or EPA Method TO-15 Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS). EPA Method TO-15 is an ambient air method modified for use on a stationary source.
Part 34	Polycyclic Aromatic Hydrocarbons Limit	ARB Method 429, Determination of Polycyclic Aromatic Hydrocarbon (PAH) Emissions from Stationary Sources

# IX. TITLE IV ACID RAIN PERMIT

Effective May 7, 2020 through May 6, 2025

#### **ISSUED TO:**

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

#### **PLANT SITE LOCATION:**

750 East Third Street Pittsburg, CA 94565

#### **ISSUED BY:**

<u>Signed by Damian Breen for Jack P. Broadbent</u> Jack P. Broadbent Executive Officer/Air Pollution Control Officer <u>May 7, 2020</u> Date

Type of Facility:	Power Plant
<b>Primary SIC:</b>	4911
Product:	Electricity

#### **DESIGNATED REPRESENTATIVE**

Name:	Jody Batten
Title:	General Manager
Phone:	(480) 231-0533

### ALTERNATE DESIGNATED REPRESENTATIVE:

Name:	Maria Barroso
Title:	EHS Specialist II
Phone:	(925) 252-8286

# IX. Title IV Acid Rain Permit

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

#### 1) STATEMENT OF BASIS

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

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

S-1 thru S-4 at the facility are not entitled to any SO2 allowances under Table 2 of 40 CFR Part 73 for the term of this permit.

### 3) COMMENTS, NOTES AND JUSTIFICATIONS

None

#### 4) PERMIT REQUIREMENTS

The owners and operators of the facility must comply with the standard requirements and special provisions set forth in the facility's Title IV permit application, which is set forth in Section XIII. The main provisions of the regulations for natural gas fired acid rain sources, such as the ones at this facility, are the requirement to obtain one  $SO_2$ allowance for each ton of  $SO_2$  that is emitted, stringent monitoring requirements for  $NO_x$ ,  $CO_2$ , and  $SO_2$ , and stringent recordkeeping and reporting requirements. Additional acid-rain-related permit requirements are stated in Standard Condition L in Section I of this permit.

# X. PERMIT SHIELD

- A. Non-applicable Requirements None.
- **B.** Subsumed Requirements None.

# XI. REVISION HISTORY

Final Title V Permit Issuance (Application 2804):	September 6, 2001
Significant Revision (Application 7081): Purpose: to increase the time allowed for a cold startup of a steam turbine from 180 minutes per event to 360 minutes per event and to allow the turbines to exceed the general NO <sub>x</sub> and CO limits during infrequent tune-ups.	January 13, 2004
<ul> <li>Reopening (Application 10470):</li> <li>Addition of Diesel Fire Pump (S-6) and Natural Gas Fired Emergency Generator (S-7)</li> <li>Addition of Cooling Tower (S-8)</li> <li>Addition of MW rating for duct burners, S-2 and S-4</li> <li>Addition of application shield language to Standard Condition I.B.1.</li> <li>Update of rule amendment dates throughout permit.</li> <li>Update of Section III, Generally Applicable Requirements</li> <li>Addition of Regulation 6-401 from gas-fired equipment, S-1 through S-5.</li> <li>Addition of Regulation 9, Rule 3, Section 303 to Section IV and Section VII tables for S-1 and S-3, Turbines.</li> <li>Addition of Regulation 9, Rule 3, Section 303 to Section VII tables for S-2 and S-4, Duct Burners.</li> <li>Update of requirements in 40 CFR 60, Subpart GG, Stationary Gas Turbines.</li> <li>Correction of citations of requirements from 40 CFR 60, Subpart Db, Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978</li> <li>Deletion of obsolete conditions</li> <li>Revision of permit shields</li> <li>Deletion of 40 CFR 75 from Section VII table for S5, Auxiliary Boiler</li> </ul>	
<ul> <li>Administrative Amendment (Application. 12281),</li> <li>Minor Revision (Application. 14970):</li> <li>Revision of Natural Gas Sampling Frequency from once every 30 days to once per month</li> </ul>	June 2, 2008

once every 30 days to once per month.
Decreased particulate emission limits based on actual source test data from facility.

# **XI.** Revision History

Title V Renewal Application No. 14296

- Added Standard Condition Text for I.B.1 and I.B.12.
- Updated regulatory requirements in Table III applicable requirements. •
- Combined Table IV-B through D with Table IV-A for the gas turbines and heat recovery steam generators.
- Updated regulatory requirements in Table IV for the gas turbines and HRSGs. •
- Change Permit Condition for S-6 Diesel Fire Pump from Condition No. 19399 to Condition No. 22851.

Title V Minor Revision Application No. 22860

- Changed the turbine output to 190 MW in Table II-A.
- Corrected typo in Table IV-A Condition 16676 Part 44 changed basis from Regulation 2-6-502 to 2-6-501.
- Corrected typo in Table VII-A. The NSPS NOx Limit monitoring requirement citation referred to Condition No. 17154 and this was corrected to Condition No. 16676.
- Updated Test Methods Table VIII.

Administrative Amendment Application No. 25536

- Change Responsible Official
- Change Facility Contact Job Title
- Add Alternate Responsible Official •

#### Administrative Amendment (Application #27473)

• Change Facility Contact

- Delete alternate responsible officials on the current Title V permit.
- Change an alternate designated representative for Title IV Acid Rain Permit.
- Update EPA's address on Section I, G. of the permit

Title V Permit Renewal Application No. 27872 May 7, 2020

October 3, 2011

February 28, 2013

July 15, 2013

October 26, 2015

# XII. GLOSSARY

ACT

Federal Clean Air Act

# BAAQMD

Bay Area Air Quality Management District

# BACT

Best Available Control Technology

**CAA** The federal Clean Air Act

CAAQS California Ambient Air Quality Standards

# CEQA

California Environmental Quality Act

# CFR

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

# СО

Carbon Monoxide

# **Cumulative Increase**

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

# District

The Bay Area Air Quality Management District

# EPA

The federal Environmental Protection Agency.

# Excluded

Not subject to any District regulations.

# **XII.** Glossary

#### **Federally Enforceable, FE**

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

### FP

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

## HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by both 40 CFR Part 63, and District Regulation 2, Rule 5.

### HRSG

Heat Recovery Steam Generator

### **Major Facility**

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

### MFR

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

### MOP

The District's Manual of Procedures.

### NAAQS

National Ambient Air Quality Standards

#### NESHAPS

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

### NMHC

Non-methane Hydrocarbons

# **XII.** Glossary

## NO<sub>x</sub>

Oxides of nitrogen.

# NSPS

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

# NSR

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

## **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC,  $NO_x$ ,  $PM_{10}$ , and  $SO_2$ .

### Phase II Acid Rain Facility

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

# POC

Precursor Organic Compounds

# PM

Particulate Matter

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

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

# PSD

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

# **XII.** Glossary

### SIP

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

## SO<sub>2</sub>

Sulfur dioxide

## Title V

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

# TSP

Total Suspended Particulate

## VOC

Volatile Organic Compounds

#### **Units of Measure:**

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

# XIII. TITLE IV (ACID RAIN) APPLICATION



United States Environmental Protection Agency Acid Rain Program

OMB No. 2050-0258 Approval expires 11/30/2012

Plant Code

55217

# **Acid Rain Permit Application**

CA

State

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

Los Medanos Energy Center, LLC

Facility (Source) Name

This submission is: new revised X for Acid Rein permit renewal

#### STEP 1

Identify the facility name, State, and plant (ORIS) code.

#### STEP 2

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

а	D
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1
X724	Yes
X725	Yes
	Yes

EPA Form 7610-16 (Revised 12-2009)

#### XIII. **Title IV Permit Application**

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

Acid Rain - Page 2

#### **Permit Requirements**

STEP 3

Read the standard requirements

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

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

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

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

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

(ii) Have an Acid Rain Permit.

#### **Monitoring Requirements**

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

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

#### Sulfur Dioxide Requirements

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

 (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar (ii) Comply with the applicable Acid Rain emissions limitations for sulfur

dioxide.

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

of the sulfur dioxide requirements as follows:

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

EPA Form 7610-16 (Revised 12-2009)

#### XIII. **Title IV Permit Application**

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

Acid Rain - Page 3

#### Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

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

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

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

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

#### Nitrogen Oxides Requirements

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

#### **Excess Emissions Requirements**

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

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

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

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

#### **Recordkeeping and Reporting Requirements**

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

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

EPA Form 7610-18 (Revised 12-2009)

#### XIII. **Title IV Permit Application**

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

Acid Rain - Page 4

#### Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

(iv) Copies of all documents used to complete an Acid Rain Program, and, application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
 (2) The designated representative of an affected source and each affected with at the source shall submit the report and each affected.

unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

#### Liability

(1) Any person who knowingly violates any requirement or prohibition of the Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
 Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001

1001.

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

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

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an

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

#### **Effect on Other Authorities**

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

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

EPA Form 7610-16 (Revised 12-2009)

#### XIII. Title IV Permit Application

Los Medanos Energy Center, LLC Facility (Source) Name (from STEP 1) Acid Rain - Page 5

#### Effect on Other Authorities, Cont'd.

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

STEP 3, Cont'd.

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

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

 (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 (5) Interfering with or impairing any program for competitive bidding for power

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

#### Certification

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

	Dale Donmoyer Name	, Authorized Sign	atory and General Manage
Signatuke Date 4/1/16	Signatuke		Date 4/1/16