

Bay Area Air Quality Management District

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

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

Duke Energy Oakland LLC
Facility #B1887

Facility Address:

50 Martin Luther King Jr. Way
Oakland, CA 94607

Mailing Address:

P. O. Box 690
Moss Landing, CA 95039-0690

Responsible Official

Elton McCrillis, Plant Manager
(831) 633-6746

Facility Contact

Steve Abbott, Environmental Specialist
(831) 633-6649

Type of Facility:	Electric Power Generation	BAAQMD Engineering Division Contact: Sanjeev Kamboj
Primary SIC:	4911	
Product:	Electricity	

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jack P. Broadbent _____
Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

September 22, 2005
Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

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

- BAAQMD Regulation 1 - General Provisions and Definitions
(as amended by the District Board on 5/2/01);
- SIP Regulation 1 - General Provisions and Definitions
(as approved by EPA through 6/28/99);
- BAAQMD Regulation 2, Rule 1 - Permits, General Requirements
(as amended by the District Board on 12/21/04);
- SIP Regulation 2, Rule 1 - Permits, General Requirements
(as approved by EPA through 1/26/99);
- BAAQMD Regulation 2, Rule 2 - Permits, New Source Review
(as amended by the District Board on 12/21/04);
- SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration
(as approved by EPA through 1/26/99);
- BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on 12/21/04);
- SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 1/26/99), and
- BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review
(as amended by the District Board on 4/16/03).

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

1. This Major Facility Review Permit was issued on September 22, 2005 and expires on September 21, 2010. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than March 21, 2010 and no earlier than September 21, 2009. **If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after September 21, 2010.** If the permit renewal has not been issued by September 21, 2010, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and 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

I. Standard Conditions

- 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 re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
 6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
 8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (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. (MOP Volume II, Part 3, §4.11)
 12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

C. Requirement to Pay Fees

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

D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment 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

I. Standard Conditions

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 entry. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. Reports shall be for the following periods: March 1st through August 31st and September 1st through February 28th or 29th, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

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

(Regulation 2-6-502, Regulation 3; 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 March 1st to February 28th or 29th of the following year. The certification shall be submitted by March 31st of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

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

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

H. Emergency Provisions

1. The permit holder may seek relief from enforcement action in the event of a

I. Standard Conditions

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

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

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 2-1-302. 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 Unit No. 1- Engine A (distillate oil)	Turbo Power & Marine 27.5 MW	TP4 Twin Pac	365 mmbtu/hr; 38,000 hp; 27.5 MW; w/water injection
2	Gas Turbine Unit No. 1- Engine B (distillate oil)	Turbo Power & Marine 27.5 MW	TP4 Twin Pac	365 mmbtu/hr; 38,000 hp; 27.5 MW; w/water injection
3	Gas Turbine Unit No. 2- Engine A (distillate oil)	Turbo Power & Marine 27.5 MW	TP4 Twin Pac	365 mmbtu/hr; 38,000 hp; 27.5 MW; w/water injection
4	Gas Turbine Unit No. 2- Engine B (distillate oil)	Turbo Power & Marine 27.5 MW	TP4 Twin Pac	365 mmbtu/hr; 38,000 hp; 27.5 MW; w/water injection
5	Gas Turbine Unit No. 3- Engine A (distillate oil)	Turbo Power & Marine 27.5 MW	TP4 Twin Pac	365 mmbtu/hr; 38,000 hp; 27.5 MW; w/water injection
6	Gas Turbine Unit No. 3- Engine B (distillate oil)	Turbo Power & Marine 27.5 MW	TP4 Twin Pac	365 mmbtu/hr; 38,000 hp; 27.5 MW; w/water injection
9	Wipe Cleaning Operation			
20	Emergency Standby Diesel Engine	Deutz	F4L912	69.5 HP

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. This section also contains provisions that may apply to temporary sources.

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

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

The full language of SIP requirements is on EPA Region 9's website. The address is <http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions>

NOTE:

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

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/2/01)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (12/21/04)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/95)	Y
SIP Regulation 2, Rule 1	General Requirements (1/26/99)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (3/6/02)	N
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	N
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/01)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (12/15/99)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	Y
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	Y
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (6/19/95)	Y

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

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

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

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

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on EPA Region 9's website. The address is:

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

Table IV - A
Source-specific Applicable Requirements
S1-S6, GAS TURBINES W/WATER INJECTION

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y	
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles		
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid & Solid Fuels)	Y	
BAAQMD Regulation 9, Rule 9	Inorganic Gaseous Pollutants - Nitrogen Oxides from Stationary Gas Turbines (9/21/94)		
9-9-302	Emission Limits, Low Usage	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1-S6, GAS TURBINES W/WATER INJECTION

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-9-502	Records, Low Usage	Y	
40 CFR 64	Compliance Assurance Monitoring (10/22/97)	Y	
64.2(a)	Applicability	Y	
64.3	Monitoring design criteria	Y	
64.3(a)	General criteria	Y	
64.3(a)(1)	Data for one or more indicators	Y	
64.3(a)(2)	Indicator range	Y	
64.3(a)(3)	Design of indicator ranges	Y	
64.3(b)	Performance criteria	Y	
64.3(b)(1)	Specifications for obtaining data	Y	
64.3(b)(2)	Verification procedures	Y	
64.3(b)(3)	Quality assurance and control practices	Y	
64.3(b)(4)	Specifications for frequency, procedures, and averaging periods	Y	
64.3(b)(4)(i)	Design of period over which data are obtained, etc.	Y	
64.3(b)(4)(iii)	Frequency for other pollutant-specific emission units	Y	
64.3(c)	Evaluation factors	Y	
64.4	Submittal requirements	Y	
64.4(a)	Submittal of monitoring that satisfies design requirements in 40 CFR 63.4	Y	
64.4(b)	Justification for the proposed monitoring	Y	
64.4(b)(1)	Presumptively acceptable monitoring approaches	Y	
64.4(c)(1)	Submittal of control device operating parameter data obtained during tests	Y	
64.4(c)(2)	Documentation of no changes to system after performance tests	Y	
64.5(b)	Deadline for submittals for other pollutant-specific emissions units	Y	
64.5(d)	Prior to approval, emissions unit subject to 40 CFR 70.1(a)(3)(i)(B)	Y	
64.6(a)	Approval by permitting authority	Y	
64.6(b)	Additional data collection	Y	
64.6(c)	Establishment of permit terms or conditions	Y	
64.6(d)	Installation, testing or final verification	Y	
64.7	Operation of approved monitoring	Y	
64.7(a)	Commencement of operation	Y	
64.7(b)	Proper maintenance	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1-S6, GAS TURBINES W/WATER INJECTION

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
64.7(c)	Continued operation	Y	
64.7(d)	Response to excursions or exceedances	Y	
64.7(e)	Documentation of need for improved monitoring	Y	
64.8	Quality improvement plan	Y	
64.9	Reporting and recordkeeping requirements	Y	
64.9(a)	General reporting requirements	Y	
64.9(b)	General recordkeeping requirements	Y	
64.10	Savings provisions	Y	
BAAQMD Regulation 11, Rule 1	Lead (3/17/82)		
11-1-301	Daily Limitation	Y	
11-1-302	Ground Level Concentration Without Background	Y	
BAAQMD Condition #2571			
Part 1	Restriction to distillate oil or lighter fuel oil (NAAQS)	Y	
Part 2	Hourly fuel usage (NAAQS)	Y	
Part 3a	NOx Limit (NAAQS)	Y	
Part 3b	NOx Limit (9-9-302)	Y	
Part 4	Fuel Sulfur Limit (NAAQS)	Y	
Part 5	NMOC Limit (NAAQS)	Y	
Part 6	Hours of Operation Limit (NAAQS)	Y	
Part 7	Limit on operating in single-single-double combination (NAAQS)	Y	
Part 8	Requirement for water injection (NAAQS)	Y	
Part 9	Determination of sulfur in distillate oil (2-6-409.2)	Y	
Part 10	Source test (2-6-409.2)	Y	
Part 11	Visible emissions check (2-6-409.2)	Y	
Part 12	Periodic monitoring (2-6-409.2)	Y	

IV. Source-Specific Applicable Requirements

Table IV - B
Source-specific Applicable Requirements
S9, WIPE CLEANING OPERATION

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (12/16/02)		
8-16-501	Solvent Records	N	
SIP Regulation 8, Rule 16	PROVISIONS NO LONGER IN CURRENT RULE Organic Compounds - Solvent Cleaning Operations (12/09/94)		
8-16-501	Solvent Records	Y ¹	
8-16-501.1	Trichloroethylene	Y ¹	
8-16-501.2	All Other Solvents	Y ¹	
40 CFR 82 Subpart E	Protection of Stratospheric Ozone (7/1/03)		
82.106	Containers Containing a Class I or Class II Substance and Products Containing or Manufactured with a Class I Substance	Y	
82.108	Warning Statements	Y	
82.110	Labels	Y	
82.112	Modification, Removal, or Interference with Warning Statements	Y	
BAAQMD Condition #5974			
Part 1	Usage Limit	N	
Part 2	Recordkeeping	N	
Part 3	Limitation on use of new solvents	N	

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

IV. Source-Specific Applicable Requirements

Table IV - C
Source-Specific Applicable Requirements
S-20: EMERGENCY STANDBY DIESEL ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Internal combustion engines below 1500 cubic inches displacement or standby engines	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Liquid and Solid Fuels	Y	
BAAQMD Regulation 9, Rule 8	Nitrogen Oxides and Carbon Monoxide From Stationary Internal Combustion Engines (8/1/01)		
9-8-330	Emergency Standby Engines, Hours of Operation	N	
9-8-530	Emergency Standby Engines, Monitoring and Recordkeeping	N	
BAAQMD Regulation 9, Rule 1	Sulfur Dioxide	N	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	N	
BAAQMD Condition #22183			
Part 4	Sulfur Content Requirement (Regulation 9-1-304)	Y	
Part 5	Demonstration of Sulfur Content limit (Regulation 2-6-501)	Y	

V. SCHEDULE OF COMPLIANCE

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

VI. PERMIT CONDITIONS

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

Condition #2571:

For S1-S6, Gas Turbines

1. Sources S1-S6, Turbines, shall be fired on No. 2 distillate oil or lighter fuel oil exclusively. (basis: NAAQS)
2. Fuel usage for each turbine shall not exceed 2,610 gal/hr. (basis: NAAQS)
- 3a. The maximum NO_x emission concentration shall be limited to 75 PPM @ 15% O₂, 3-hr average, for each gas turbine exhaust. (basis: NAAQS)
- 3b. The maximum NO_x emission concentration shall be limited to 65 PPM @ 15% O₂, for each gas turbine exhaust except for startup and shutdown periods per Regulation 9-9-114. (basis: 9-9-302)
4. The fuel used shall have sulfur content less than 0.3% by weight. (basis: NAAQS)
5. The maximum amount of non-methane hydrocarbon emissions shall not exceed 40 lbs/hr total (actual operating time) for all 6 gas turbines. (basis: NAAQS)
6. The maximum total operating time of the 6 gas turbines shall be limited to 5000 hours in any calendar year. (basis: NAAQS)
7. The gas turbine generating units shall not be operated in any single-single-double combination. (basis: NAAQS)

VI. Permit Conditions

Condition #2571:
For S1-S6, Gas Turbines

8. NO_x emissions from each turbine shall be controlled at all times by water injection except during startup and shutdown. Water-to-fuel ratio shall be maintained in the range of 60% to 90% (volume basis) during all periods of operation. (basis: NAAQS)
9. All shipments of fuel oil to the facility shall have either a vendor certification or a laboratory analysis of the sulfur and nitrogen contents of the fuel. A composite sample shall be used for the analysis. (basis: District Regulation 2-6-503, 40 CFR 64)
10. A source test shall be conducted at each turbine for every 2,000 hours of operation to verify compliance with the above NO_x limits, NMOC limit, and the Regulation 9, Rule 9 limit. (basis: 2-6-409.2)
11. A visible emissions check shall be performed on every turbine for every 400 hours of operation. The visible emissions check shall take place while the equipment is operating and during daylight hours. If any visible emissions are detected, the operator shall take corrective action, and check for visible emissions the next time that the turbine is operated. If no visible emissions are detected, the operator shall continue to check for visible emissions every 400 hours of operation. (basis: 2-6-409.2)
12. To ensure compliance with parts 2, 3, 4, 6, 7, 8, 9, 10, and 11 of this condition, the permit holder shall keep the following records:
 - a. Fuel usage at each turbine
 - b. The water to fuel volume ratio for each turbine on a daily basis when operating.
 - c. Vendor certification of sulfur content of all shipments of fuel to the facility
 - d. Total number of hours of operation for each turbine, totaled on a monthly basis by turbine
 - e. Records of all source tests
 - f. Records of all visible emissions checks, the person performing the check, and any corrective actions taken(basis: 2-6-409.2)
13. The owner/operator shall record the water-to-fuel ratio during operation on at least a daily basis. (basis: District Regulation 2-6-503, 40 CFR 64)

VI. Permit Conditions

14. The water and fuel meters shall be accurate to within plus or minus 5 percent. (basis: 40 CFR 64)
15. The water and fuel meters shall be calibrated every two years using the meter manufacturer's specifications for calibration. (basis: 40 CFR 64)
16. The owner/operator shall conduct source testing in accordance with the District's Manual of Procedures to confirm compliance at the water-to-fuel ratio of 60% to 90% on a volume basis and at the current fuel nitrogen content. The owner/operator shall conduct the testing within the first 877 hours of operation after issuance of the renewal permit or two years after issuance of the renewal permit, whichever is earlier. The owner/operator shall submit a testing protocol to the Manager of the District's Source Test Section at least seven (7) days prior to the test for review. The owner/operator shall notify the Manager of the District's Source Test Section at least seven (7) days prior to the test, to provide the District staff the option of observing the testing. Within 45 days of test completion, a comprehensive report of the test results shall be submitted to the Manager of the District's Source Test Section for review and disposition. The test shall be used to verify compliance with the CARB's diesel fuel nitrogen content limit of 500 ppmw. If a turbine has not operated during the permit term, testing is not required. (basis: Regulations 2-1-403, 2-6-503)

Condition #5974:

For S9, Wipe Cleaning

- *1. Total evaporation of solvent from this source shall not exceed 20 gallons in any consecutive twelve-month period. (basis: cumulative increase)
- *2. The operator shall maintain a log of all solvents used in this operation. The log shall contain the following information:
 - a. type and brand(s) of solvents used
 - b. mix ratio of components usedThese records shall be kept on an operational daily basis, with a quarterly summation. All records shall be retained for a period of five years from date of entry. This logbook shall be kept on site and made available to District staff upon request.
(basis: cumulative increase)
- *3. The permit holder shall apply for and receive permission from the District before using solvents other than 1,1,1-trichloroethane. (basis: cumulative increase)

VI. Permit Conditions

Condition #22183:
For S20, Emergency Standby Diesel Engine

CONDITIONS FOR NON "ESSENTIAL" EMERGENCY ENGINES:

Stationary Equipment Requirements

- *1. Hours of Operation: The owner/operator shall operate the emergency standby engine(s) only to mitigate emergency conditions or for reliability-related activities. Operating while mitigating emergency conditions is unlimited. Operating for reliability-related activities is limited to 100 hours per any calendar year. [Basis: Regulation 9-8-330]

"Emergency Conditions" is defined as any of the following:

- a. Loss of regular natural gas supply.
- b. Failure of regular electric power supply.
- c. Flood mitigation.
- d. Sewage overflow mitigation.
- e. Fire.
- f. Failure of a primary motor, but only for such time as needed to repair or replace the primary motor. [Basis: Regulation 9-8-231]

"Reliability-related activities" is defined as any of the following:

- a. Operation of an emergency standby engine to test its ability to perform for an emergency use, or
- b. Operation of an emergency standby engine during maintenance of a primary motor.

[Basis: Regulation 9-8-232]

- *2. The owner/operator shall equip the emergency standby engine(s) with either:
- a. a non-resettable totalizing meter that measures the hours of operation for the engine; or
 - b. a non-resettable fuel usage meter, the maximum hourly fuel rate shall be used to convert fuel usage to hours of operation. [Basis: Regulation 9-8-530]
- *3. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 2 years and shall make the log available for District inspection upon request:

VI. Permit Conditions

- a. Hours of operation (total).
 - b. Hours of operation (emergency).
 - c. For each emergency, the nature of the emergency condition.
 - d. Fuel usage for engine(s) if a non-resettable fuel usage meter is utilized.
[Basis: Regulations 9-8-530 and 1-441]
4. This source shall only be fired on diesel fuel with a sulfur content not to exceed 0.5% by weight. [Basis: Reg 9-1-304]
 5. To demonstrate compliance with the above sulfur limit, the Permit Holder shall secure and maintain onsite, for at least 5 years, one of the following records: [Basis: Reg 2-6-501]
 - a. A written statement, as applicable, received from the diesel fuel supplier(s) certifying that the diesel fuel purchased from the supplier does not exceed 0.5% by weight or meets the sulfur limitations for CARB Vehicular Diesel Fuel as specified in 13 CCR, Section 2281, California Code of Regulations, or
 - b. A vendor certification of sulfur content, or
 - c. Fuel test results showing the sulfur content from a District-approved test.

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

**Table VII – A
 Applicable Limits and Compliance Monitoring Requirements
 S1-S6, GAS TURBINES W/WATER INJECTION**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-302	Y		65 ppmv, dry @ 15% O ₂	BAAQMD condition #2571, part 12b	P/D	water-to-fuel monitoring
	BAAQMD 9-9-302	Y		65 ppmv, dry @ 15% O ₂ ,	BAAQMD condition #2571, part 10	P/every 2000 hours of operation	source test
	BAAQMD condition #2571, part 3a	Y		75 ppmv, dry @ 15% O ₂ , 3-hr average	BAAQMD condition #2571, part 12b	C	water-to-fuel monitoring
	BAAQMD condition #2571, part 3a	Y		75 ppmv, dry @ 15% O ₂ , 3-hr average	BAAQMD condition #2571, part 10	P/every 2000 hours of operation	source test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1-S6, GAS TURBINES W/WATER INJECTION

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOX	BAAQMD condition #2571, part 3b	Y		65 ppmv, dry @ 15% O ₂ , except for startup and shutdown	BAAQMD condition #2571, part 12b	P/H	water-to-fuel monitoring
	BAAQMD condition #2571, part 3b	Y		65 ppmv, dry @ 15% O ₂ , except for startup and shutdown	BAAQMD condition #2571, part 10	P/every 2000 hours of operation	source test
SO2	BAAQMD 9-1-301	Y		GLC 0.5 ppm (3 min average) 0.25 ppm (60 min average) 0.05 ppm (24 hr average)		N	
	BAAQMD 9-1-304	Y		Sulfur content of fuel < 0.5% by weight	BAAQMD condition #2571, part 9	P/E	fuel analysis or certification
	BAAQMD condition #2571, part 2	Y		Sulfur content of fuel < 0.3% by weight	BAAQMD condition #2571, part 9	P/E	fuel analysis or certification
Opacity	BAAQMD Regulation 6-301	N		Ringelmann No. 1 for no more than 3 min/hr	BAAQMD condition #2571, part 11	P/every 400 hours	visible emissions check
FP	BAAQMD Regulation 6-310	Y		0.15 grain/dscf		N	
NMOC	BAAQMD condition #2571, part 3	Y		< 40 lb/hr for all turbines combined	BAAQMD condition #2571, part 10	P/every 2000 hours of operation	source test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1-S6, GAS TURBINES W/WATER INJECTION

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Lead	BAAQMD 11-1-301	Y		15 lb/day		N	
	BAAQMD 11-1-302	Y		GLC not to exceed 1.0 ug/cu.m., 24 hr. avg.		N	
Hours of operation	BAAQMD 9-9-302	Y		< 877 hr/yr for each turbine	BAAQMD 9-9-302	P/E	records
	BAAQMD condition #2571, part 4	Y		< 5000 hr/yr for all turbines combined	BAAQMD condition #2571, part 12	P/E	records

Table VII - B
Applicable Limits and Compliance Monitoring Requirements
S9, WIPE CLEANING

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD condition #5974, part 1	Y		< 20 gal/yr	BAAQMD condition #5974, part 2	P/D	records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - C
Applicable Limits and Compliance Monitoring Requirements
S-20: EMERGENCY STANDBY DIESEL ENGINE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD Regulation 6-303	Y		Ringelmann No. 2 for 3 minutes in any hour	None	N	NA
FP	BAAQMD Regulation 6-310	Y		0.15 gr/dscf	None	N	NA
SO ₂	BAAQMD Regulation 9-1-301	Y		Ground Level Concentrations: 0.5 ppm for 3 consecutive minutes, 0.25 ppm averaged over 60 consecutive minutes, 0.05 ppm averaged over 24 hours	None	N	NA
SO ₂	BAAQMD Regulation 9-1-304	Y		Fuel Sulfur Limit 0.5%	BAAQMD condition #22183, part 4	P/M	fuel analysis or vendor certification
Hours of Operation	BAAQMD Regulation 9-8-330	N		100 hours in a calendar year	BAAQMD Regulation 9-8-530	Periodic/eac h time fuel is added	records

VIII. TEST METHODS

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

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling, EPA Reference Method 5 (40 CFR 60, Appendix A), Determination of Particulate Emissions from Stationary Sources
BAAQMD 9-1-304	Fuel Burning (Liquid and Solid Fuels)	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.
BAAQMD 9-9-302	Emission Limits, Low Usage	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 11-1-301	Daily Limitation	Manual of Procedures, Volume IV, ST-9, Lead
BAAQMD Condition #2571		
Part 3	NOx Limit	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
Part 4	Fuel Sulfur Limit	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.
Part 5	NMOC Limit	Manual of Procedures, Volume IV, ST-7, "Organic Compounds"

IX. PERMIT SHIELD

Not applicable

X. REVISION HISTORY

Title V Permit Issuance (Application #18703): March 22, 2000

Renewal Title V Permit Issuance (Application #10586): September 22, 2005

XI. GLOSSARY

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CEQA

California Environmental Quality Act

CFR

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

CO

Carbon Monoxide

Cumulative Increase

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

District

The Bay Area Air Quality Management District

dscf

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Dry Standard Cubic Feet

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District Regulations.

FE, Federally Enforceable

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

FP

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

Grain

1/7000 of a pound

HAP

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

Major Facility

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

MFR

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

MOP

The District's Manual of Procedures.

NA

Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPs

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

XI. Glossary

NMHC

Non-methane Hydrocarbons

NO_x

Oxides of nitrogen.

NSPS

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

NSR

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

Offset Requirement

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

Phase II Acid Rain Facility

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

POC

Precursor Organic Compounds

PM

Total Particulate Matter

PM₁₀

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

PSD

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

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

XI. Glossary

of the Act.

SO₂

Sulfur dioxide

Title V

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

TSP

Total Suspended Particulate

VOC

Volatile Organic Compounds

Units of Measure:

bhp	=	brake-horsepower
btu	=	British Thermal Unit
F	=	degrees Fahrenheit
g	=	grams
gal	=	gallon
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m ²	=	square meter
min	=	minute
g	=	micro-gram, one millionth of a gram
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

Symbols:

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

XI. Glossary