

Bay Area Air Quality Management District

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

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:
Calpine Gilroy Cogen, L. P.
Facility #B1180

Facility Address:
1400 Pacheco Pass Highway
Gilroy, CA 95020

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

Responsible Official
Larry Krumland, Vice-President,
(408) 792-1234

Facility Contact
Brian Martin
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Type of Facility: Cogeneration Facility
Primary SIC: 4911
Product: Electricity

BAAQMD Permit Division Contact:
Brenda Cabral

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Pete Hess for Ellen Garvey _____
Ellen Garvey, Air Pollution Control Officer/Executive Officer

July 26, 2000 _____
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 5/17/00);
SIP Regulation 1 - General Provisions and Definitions
(as approved by EPA through 8/27/99);
BAAQMD Regulation 2, Rule 1 - Permits, General Requirements
(as amended by the District Board on 5/17/00);
SIP Regulation 2, Rule 1 - Permits, General Requirements
(as approved by EPA through 2/25/99);
BAAQMD Regulation 2, Rule 2 - Permits, New Source Review
(as amended by the District Board on 5/17/00);
SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant
Deterioration
(as approved by EPA through 2/25/99); and
BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on 5/17/00).
SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through 2/25/99).
BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review
(as amended by the District Board on 10/20/99).

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

1. This Major Facility Review Permit was issued on May 12, 1998 and expires on May 12, 2003. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than November 12, 2002 and no earlier than May 12, 2002. **If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after May 12, 2003.** (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)

5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or 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, nor 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 Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)

C. Requirement to Pay Fees

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

D. Inspection and Entry

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

E. Records

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

All required monitoring reports must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be May 12, 1998 to November 11, 1998. Subsequent reports shall be for the following periods: November 12th through May 11th and May 12th

I. Standard Conditions (continued)

through November 11th, and are due thirty days 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 May 12th to May 11th of the following year. The certification shall be submitted by June 12th 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 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)

I. Standard Conditions (continued)

2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond the permit holder's reasonable control 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. Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval. (MOP Volume II, Part 3, §4.8)
3. Notwithstanding the foregoing, 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)

II. EQUIPMENT LIST

A. Permitted Source List

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits.

Table II-A

S-#	Description	Make or Type	Model	Capacity
S-100	Gas Turbine Generator, Natural Gas, Fuel Oil	General Electric	Frame 7	87 MW, 1085 MM Btu/hr (HHV) @ 35 F
S-101	Auxiliary Boiler, Natural Gas, Fuel Oil	Nebraska	NSE68	104 MM Btu/hr (natural gas) 101 MM Btu/hr (fuel oil)
S-102	Auxiliary Boiler, Natural Gas, Fuel Oil	Nebraska	NSE68	104 MM Btu/hr (natural gas) 101 MM Btu/hr (fuel oil)

B. Abatement Device List

Table II-B

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-100	Catalytic Afterburner	S-100	Cond #2780 part 3	Oxidizing Catalyst shall operate during all periods of turbine operation except during start-up, which will not exceed one-half hour for warm-start, or one hour for cold start.	10 ppm

III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements 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.

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

1. BAAQMD regulation(s):
 The date(s) of adoption or most recent amendment of the regulation by the District Board
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 included in Appendix A of this permit if the SIP requirement is different from the current BAAQMD requirement.

NOTE:

There are differences between the current BAAQMD rule and the version of the rule in the SIP. For specific information, contact the District's Rule Development Section of the Enforcement Division. All sources must comply with both versions of the rule until US EPA has reviewed and approved the District's revision of the regulation.

Table III

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/17/00)	N
SIP Regulation 1	General Provisions and Definitions (8/27/99)	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 (11/2/94)	N
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	N

III. Generally Applicable Requirements (continued)

Table III (continued)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/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 (12/20/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/91)	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
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)	
Subpart F, 40 CFR 82.156	Leak Repair	Y
Subpart F, 40 CFR 82.161	Certification of Technicians	Y
Subpart F, 40 CFR 82.166	Records of Refrigerant	Y

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

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

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

1. BAAQMD regulation(s):
 The date(s) of adoption or most recent amendment of the regulation by the District Board
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 included in Appendix A of this permit if the SIP requirements are different from the current BAAQMD requirements.. All other text may be found in the regulations themselves.

Table IV-A
S100 - GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (11/3/93)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	Plans and Specifications	Y	
1-522.2	Installation Scheduling	Y	
1-522.3	Performance Testing	Y	
1-522.4	Periods of Inoperation Greater Than 24 Hours	Y	
1-522.5	Calibration	Y	
1-522.6	Accuracy	Y	
1-522.7	Excesses	Y	
1-522.8	Monthly Reports	Y	

IV. Applicable Requirements (continued)

Table IV-A (continued)
S100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
1-522.9	Records	Y	
1-522.10	Monitors Required by Sections 1-521 or 2-1-403	Y	
1-602	Area and Continuous Emission Monitoring Requirements	N	
BAAQMD Regulation 2, Rule 1	Regulation 2, Rule 1 – Permits, General Requirements (6/7/95)		
2-1-501	Monitors	N	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann Number 1 Limitation	N	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	N	
9-1-302	General Emission Limitations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (9/21/94)		
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	
9-9-305	Emission Limits, Existing Low-NOx Turbines	Y	
9-9-401	Certification, Efficiency	Y	
9-9-501	Monitoring and recordkeeping requirements	Y	
BAAQMD Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
40 CFR 60	Standards of Performance for New Stationary Sources (12/23/71)	Y	
Subpart A	General Provisions	Y	
60.4(b)	Reports to EPA and District	Y	

IV. Applicable Requirements (continued)

Table IV-A (continued)
S100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.7(a)	Written notification	Y	
60.7(b)	Records	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.19	General notification and reporting requirements	Y	
Subpart GG	Standards of Performance for Stationary Gas Turbines (1/27/82)		
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
60.335	Test Methods and Procedures	Y	
BAAQMD Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
40 CFR 72	Acid Rain Program		
72.6(b)(6)	Exemption from requirements of Acid Rain Program	Y	
BAAQMD Cond# 2780			
Part 1a	BACT NOX Limit (basis: BACT, PSD)	Y	
Part 1b	Startup and shutdowns (basis: BACT)	Y	
Part 1c	Steam Injection (basis: BACT, PSD)	Y	
Part 1e	RACT NOX limit adjusted for capacity increase and efficiency (basis: 2-2-604, 9-9-113, 9-9-114, 9-9-305, 9-9-401)	Y	
Part 1f	Annual NOX limit (basis: BACT, 9-9-305, 2-2-604)	Y	
Part 1g	Daily NOX limit (basis: 2-2-301)	Y	
Part 3a	CO control requirement (basis: BACT)	Y	
Part 3b	Annual CO emission limit (basis: BACT)	Y	
Part 3c	CO concentration limit (basis: BACT)	Y	
Part 3d	CO emissions during Startup and shutdown periods (basis: BACT)	Y	
Part 3e	CO emissions during operation at less than 80 percent load (basis: BACT)	Y	
part 3f	CO emissions during operation at low ambient temperature (basis: BACT)	Y	

IV. Applicable Requirements (continued)

Table IV-A (continued)
S100 – GAS TURBINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
part 3g	CO emissions during fuel oil combustion (basis: BACT)	Y	
part 5	Fuel oil sulfur limit (basis: BACT)	Y	
part 6	NMHC/TSP Limit (basis: Cumulative increase)	Y	
part 6a	Particulate monitoring (basis: 2-6-501)	Y	
part 6b	Particulate recordkeeping (basis: 2-6-501)	Y	
part 6c	Particulate emission factor and calculation (basis: 2-6-501)	Y	
part 7	Natural Gas Curtailment Requirement (basis: BACT, PSD)	Y	
part 8	Steam Injection (basis: BACT)	Y	
part 10a	SO2 Limit (basis: BACT)	Y	
part 10b	SO2 monitoring during fuel oil combustion (basis: 2-6-501)	Y	
part 11	CEM requirement (basis: PSD, BACT, 2-1-403)	Y	
part 13a	Stack height (basis: PSD)	Y	
part 13b	Sampling ports (basis: BAAQMD 1-501)	Y	
part 14	Recordkeeping (basis: PSD, BACT)	Y	
part 15	Fuel oil/NOx limit demonstration (basis: BACT)	Y	
part 17	Fuel Usage limit (basis: Cumulative increase)	Y	
part 18	Hours of Operation (basis: Cumulative increase)	Y	
PSD Permit			
III	Facilities Operation	Y	
V	Right to Entry	Y	
VI	Transfer of Ownership	Y	
VII	Severability	Y	
VIII	Other Applicable Regulations	Y	
IX, C	Emission Limits for NOx	Y	
IX, D	Performance Tests	Y	
IX, E	Continuous Emission Monitoring	Y	
IX, F	Fuel Usage and Sulfur Content/Steam Injection	Y	
IX, G	New Source Performance Standards	Y	

IV. Applicable Requirements (continued)

**Table IV-B
 S101, S102 – BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (11/3/93)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	Plans and Specifications	Y	
1-522.2	Installation Scheduling	Y	
1-522.3	Performance Testing	Y	
1-522.4	Periods of Inoperation Greater Than 24 Hours	Y	
1-522.5	Calibration	Y	
1-522.6	Accuracy	Y	
1-522.7	Excesses	Y	
1-522.8	Monthly Reports	Y	
1-522.9	Records	Y	
1-522.10	Monitors Required by Sections 1-521 or 2-1-403	Y	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
BAAQMD Regulation 2, Rule 1	Regulation 2, Rule 1 - Permits, General Requirements (6/7/95)		
2-1-501	Monitors	N	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann Number 1 Limitation	N	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

IV. Applicable Requirements (continued)

**Table IV-B (continued)
 S101, S102 – BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	N	
9-1-302	General Emission Limitations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9, Rule 7	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (9/15/93)		
9-7-301	Emission Limits-Gaseous Fuel	Y	
9-7-301.1	Emission Limits-NOx	Y	
9-7-301.2	Emission Limits-CO	Y	
9-7-302	Emission Limits-Non-Gaseous Fuel	Y	
9-7-302.1	Emission Limits-NOx	Y	
9-7-302.2	Emission Limits-CO	Y	
9-7-303	Emission Limits-Gaseous Fuels-and Non-Gaseous Fuel	Y	
9-7-305	Natural Gas Curtailment-Non-Gaseous Fuel	Y	
9-7-305.1	Natural Gas Curtailment-Non-Gaseous Fuel: NOx limit	Y	
9-7-305.2	Natural Gas Curtailment-Non-Gaseous Fuel: CO limit	Y	
9-7-306	Equipment Testing Non-Gaseous Fuel	Y	
9-7-306.1	Emission Limits-NOx	Y	
9-7-306.2	Emission Limits-CO	Y	
9-7-306.3	Time limit	Y	
9-7-501	Combinations of Different Fuels	Y	
9-7-503	Records	Y	
9-7-503.2	Records of natural gas curtailment	Y	
9-7-503.3	Records of equipment testing	Y	
9-7-503.4	Source test records	Y	
9-7-603	Compliance Determination	Y	

IV. Applicable Requirements (continued)

**Table IV-B (continued)
 S101, S102 – BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)		
40 CFR 60	Standards of Performance for New Stationary Sources (12/23/71)	Y	
Subpart A	General Provisions	Y	
60.4(b)	Reports to EPA and District	Y	
60.7(a)	Written notification	Y	
60.7(b)	Records	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.19	General notification and reporting requirements	Y	
Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (12/16/87)	Y	
60.40b (b)(3)	NOX limits (Not subject to SO2 and particulate limits)	Y	
60.44b (a)(1)(ii)	NOx limit	Y	
60.44b(h)	NOx limit applicable at all times	Y	
60.44b(i)	Compliance: 24-hr basis	Y	
BAAQMD Cond #2780			
part 3b	Annual CO emission limit (basis: BACT)	Y	
part 4	NOx limit (basis: PSD, BACT)	Y	
part 5	Fuel oil sulfur limit (basis: PSD, BACT)	Y	
part 6	NMHC/TSP Limit (basis: Cumulative increase)	Y	
part 6a	Particulate monitoring (basis: 2-6-501)	Y	
part 6b	Particulate recordkeeping (basis: 2-6-501)	Y	
part 10a	SO ₂ Limit (basis: BACT)	Y	
part 10b	SO ₂ monitoring during fuel oil combustion (basis: 2-6-501)	Y	

IV. Applicable Requirements (continued)

Table IV-B (continued)
S101, S102 – BOILERS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
part 11	CEM requirement (basis: PSD, BACT, 2-1-403)	Y	
part 13b	Sampling ports (BAAQMD 1-501)	Y	
part 14	Recordkeeping (basis: PSD, BACT)	Y	
part 17	Fuel Usage limit (basis: Cumulative increase)	Y	
part 18	Hours of Operation (basis: Cumulative increase)	Y	
PSD Permit			
III	Facilities Operation	Y	
V	Right to Entry	Y	
VI	Transfer of Ownership	Y	
VII	Severability	Y	
VIII	Other Applicable Regulations	Y	
IX, C	Emission Limits for NOx	Y	
IX, D	Performance Tests	Y	
IX, F	Fuel Usage and Sulfur Content	Y	

V. SCHEDULE OF COMPLIANCE

The permit holder shall continue to comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit.

VI. PERMIT CONDITIONS

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

A. Source-Specific Permit Conditions

Calpine Gilroy Cogen, L. P.

Facility #B1180

PERMIT CONDITION #2780 (amended August 29, 1987, June 27, 1989, September 13, 1990 [APPLICATION NO. 5140], May, 1998 [Application #25841], December, 1998 [Application #18872], and January, 2000 [Application #455])

- 1a. Except as provided in condition 7, the oxides of nitrogen (NO_x) concentration in the gas turbine exhaust shall not exceed 25 ppm_{dv} at 15% oxygen averaged over any three-hour period whether firing natural gas or fuel oil. (BACT, PSD)
- 1b. The limit in part 1a shall not apply during cold start-up, which is not to exceed four hours, or shut-down procedure, which is not to exceed two hours. However, for daily start-ups after a shut-down of twelve (12) hours or less, the start-up period shall be limited to one (1) hour. (BACT)
- 1c. During any mode of operation, the owner or operator shall inject steam for NO_x control at the turbine when steam of specified pressure and temperature is available. (BACT, PSD)
- 1d. deleted BAAQMD Application #445
- 1e. Effective after startup of the modification proposed in Application #445, the oxides of nitrogen (NO_x) concentration in the gas turbine exhaust shall not exceed 21.0 ppm_{dv} at 15% oxygen averaged over any calendar day whether firing natural gas or fuel oil, excluding periods of startup or shutdown pursuant to Regulation 9-9-114 or periods of inspection and maintenance pursuant to Regulation 9-9-113. (2-2-604, 9-9-113, 9-9-114, 9-9-305, 9-9-401)
- 1f. Mass emissions of NO_x at S1, Gas Turbine, shall not exceed 323.7 tons per any consecutive twelve months. The permit holder shall install current Best Available Control Technology if this limit is exceeded or if the permit holder applies for a limit exceeding this limit. (BACT, 9-9-305, 2-2-604)

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

- 1g. Mass emissions of NO_x at S1, Gas Turbine, shall not exceed 1876 lb in any calendar day. (Regulation 2-2-301)
2. (deleted BAAQMD Title V application #25841)
- 3a. An oxidizing catalyst (A100) shall reduce CO emissions from the gas turbine (S100). The catalyst shall operate during all periods of turbine operation except during start-up, which shall not exceed one hour for warm start, or four hour for a cold start. (9/98 BACT)
- 3b. Annual CO emissions shall not exceed 100 tons in any consecutive twelve months for the entire facility. Sampling ports for testing for compliance with this condition shall be maintained as approved by the District's Source Test Section. (6/27/89) (BACT)
- 3c. CO emissions in the gas turbine exhaust shall not exceed 10 ppmdv at 15% oxygen over any three-hour period whether firing natural gas or fuel oil. (9/98 BACT)
- 3d. The limit in paragraph 3c shall not apply during startup and shutdown periods. Emissions during startup and shutdown periods shall be limited to 14670 lbs per any consecutive twelve months. (6/27/89 BACT)
- 3e. The limit in paragraph 3c shall not apply during operation at less than 80 percent load, which is not to exceed 750 hours in any consecutive twelve months. The emissions during operation at less than 80 percent load shall not exceed 14.8 tons per any consecutive twelve months. (9/98 BACT)
- 3f. The limit in paragraph 3c shall not apply when ambient temperature is less than 35 degrees F. The CO limit when ambient temperature is less than 35 degrees F shall be 15 ppmdv, averaged over one hour. Operation at this alternate limit shall be limited to 100 hours in any consecutive twelve-month period. Emissions of CO while operating under this condition shall be limited to 3120 lbs in any consecutive twelve-month period. (9/98 BACT)
- 3g. The limit in paragraph 3c shall not apply during periods of natural gas curtailment and for short testing periods using non-gaseous fuel. However, the operator shall shut down the facility and apply for an increase in the CO limit if operating with non-gaseous fuel causes the facility to exceed the annual CO limit in paragraph 3b. (BACT)
4. Nitrogen oxide (NO_x) emissions from each auxiliary boiler (S-101, S-102) shall not exceed 40 ppmdv at 3% oxygen averaged over any three-hour period. (PSD, BACT)
5. Any fuel oil fired (except as provided in condition #7) shall not exceed a maximum sulfur content of 0.12% (by weight). The owner or operator shall maintain records on

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

the duration of fuel oil firing, the sulfur content, and in which operating sources fuel oil firing took place. All fuel receipts must be certified to 0.12% weight sulfur or less. (PSD, BACT)

6. Total emissions from the gas turbine (S-100) and auxiliary boilers (S-101, S-102) shall not exceed 25 ton/year TSP or 40 ton/yr NMHC. (Cumulative increase)
- 6a. As long as natural gas is burned exclusively at the turbine and boilers, particulate emissions shall not be monitored. Within 2 weeks of fuel oil use at S100, Turbine, or S101-S102, Boilers, the permit holder shall have source tests performed to measure TSP from the source or sources burning fuel oil. As a contingency measure, the permit holder shall submit a proposed test protocol to the Source Test group at the District within 3 months of issuance of this permit for approval. The permit holder shall notify the Source Test group at least one week prior to performing the test or tests. The test or tests shall form the basis for the emission factor or factors to be used when burning fuel oil. (basis: Regulation 2-6-501)
- 6b. After fuel oil firing has commenced, the permit holder shall keep records of fuel oil firing to determine whether the 25 tpy limit for TSP has been violated. The permit holder shall use these records to determine the TSP emissions on a rolling twelve month basis. In this case, the emission factors used for natural gas burning shall be:
Turbine: 2.5 lb/hr
Boilers: 5 lb/mmscf natural gas
(basis: Regulation 2-6-501)
- 6c. After the source test required by part 17 is performed, the permit holder shall use the source test to develop an emission factor for particulate for the turbine and shall use the emission factor to determine the particulate emissions from the turbine on a rolling twelve month basis for compliance with part 6 of this condition. (basis: Regulation 2-6-501)
- 7a. During periods of natural gas curtailment, the maximum sulfur content of the fuel oil burned shall not exceed 0.25% (by weight), provided that the gas turbine was being fired on natural gas prior to the curtailment.
- 7b. During such periods, the NO_x emission limit in condition #1a shall not apply.

NO_x will be controlled via steam injection at no less than the rate determined by the steam/fuel ratio specified for natural gas firing and no greater than the lesser of the rate determined by the manufacturers recommended maximum steam/fuel ratio or 83,000

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

lb/hr (at 59 F). (PSD, BACT)

8. The steam injection to control NO_x emissions from the turbine shall be operated during all periods when injection steam is available at the specified pressure and temperature. (BACT)
9. Pursuant to the PSD permit, the owner or operator shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of steam injected to fuel fired in the turbine. (PSD, 2-1-403)
- 10a. The emissions of sulfur dioxide (SO₂) shall not exceed 3087 lb/day from the entire facility, except under natural gas curtailment as stated in condition #7. (BACT)
- 10b. The daily SO₂ limit shall not be monitored when the facility burns natural gas exclusively. When the facility burns fuel oil, and is not operating under natural gas curtailment, the SO₂ limit shall be monitored by calculating the SO₂ emitted using the following equation:

$$\text{lb SO}_2 \text{ emitted/day} =$$
$$(\text{fuel oil burned}) \times (\text{density fuel oil}) \times (\%S \text{ by weight}) \times (2.0 \text{ lb SO}_2/\text{lb S})$$

Fuel oil shall be measured in gal/day. Density shall be measured in lb/gal. The owner or operator may measure the density or use a default value of 7.20 lb/gal. The sulfur content shall be as certified by the supplier. The owner or operator shall calculate the SO₂ emitted on a daily basis when the facility burns fuel oil, unless the facility is under natural gas curtailment. In addition to the records required by Condition 6b, the following records shall be kept:

sulfur content of the fuel by weight
density of the fuel
SO₂ emitted
(Regulation 2-6-501)

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

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

12. (deleted BAAQMD Title V application #25841)
- 13a. The exhaust stack from the gas turbine (P-100) shall be constructed to a height of at least 80 feet. (PSD)
- 13b. Sampling ports for testing for compliance with these conditions shall be maintained as approved by the District's Source Test Division. (BAAQMD 1-501)
14. All records associated with the above conditions shall be retained by the owner or operator, for at least five years, for review by the District and shall be supplied to the District upon request. The recording format of conditions #5, #9, and #17 shall be subject to the approval of the APCO. (PSD, BACT)
15. Prior to burning fuel oil as the primary fuel in the gas turbine, the owner or operator shall demonstrate to the satisfaction of the APCO, during an approved test period, that the "quiet combustor" is capable of meeting the emission requirements for part #1. If within six months of initial start-up of fuel oil as a discretionary fuel, the applicant is unable to achieve the concentration limitation of 25 ppm, the applicant shall take action to install a selective catalytic reduction system, or another APCO approved equivalent control system capable of satisfying the emission limit in condition #1. (BACT)
16. (deleted BAAQMD Title V application #25841)
17. In order to assure that the offset trigger levels for NMHC (40 TPY) and the PSD modeling trigger level for TSP (25 TPY) are not exceeded, total fuel oil usage in the gas turbine (S-100) shall not exceed 0.55 million barrels/year, except as provided below: "If the owner or operator can demonstrate, through the use of District approved source test methods, that the mass emissions of NMHC exiting the catalytic converter are less than those used to establish the above barrel limitation, then that limit may be renegotiated." (Cumulative increase)
18. The auxiliary boilers (S-101, S-102) shall not operate simultaneously with the gas turbine more than a combined total of 28 boiler hours/day or 3950 boiler hours/year. The auxiliary boilers may operate any time during period of gas turbine outage. (9/13/90) (Cumulative increase)

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

Condition #14299

For **S100 - GAS TURBINE,**
S101 AND S102, BOILERS

1. All natural gas burned at sources S100, Gas Turbine, and S101-102, Boilers shall be PUC quality gas. (basis: 2-1-403)

Following are the PSD conditions imposed by EPA before construction in 1985.

For **S100 - GAS TURBINE,**
S101 AND S102, BOILERS

- I. (deleted BAAQMD Title V application #25841)
- II. (deleted BAAQMD Title V application #25841)
- III. Facilities Operation

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

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

V. Right to Entry

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

- A. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Approval to Construct/Modify; and
- B. at reasonable times to have access to and copy any records required to be kept under the

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

terms and conditions of this Approval to Construct/Modify; and

- C. to inspect any equipment, operation, or method required in this Approval to Construct/Modify; and
- D. to sample emissions from the source. (PSD)

VI. Transfer of Ownership

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

VII. Severability

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

VIII. Other Applicable Regulations

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

IX. Special Conditions

A. (deleted BAAQMD Title V application #25841)

B. Air Pollution Control Equipment

On and after the date of startup of the facility, the owner or operator shall install, continuously operate, and maintain a steam injection system to reduce emission of nitrogen oxides from the gas turbine.

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

C. Emission Limits for NOX

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

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

On and after the date of startup of the auxiliary boilers, the owner or operator shall not discharge or cause the discharge into the atmosphere NOX in excess of 40 ppmv at 3% O₂ (3-hour average). (PSD)

D. Performance Tests

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

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

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

E. Continuous Emission Monitoring

1. Prior to the date of startup and thereafter, the owner or operator shall install, maintain

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

and operate the following continuous monitoring systems in the heat recovery steam generator exhaust stack:

Continuous monitoring systems to measure stack gas NOX concentration, fuel usage, steam-to-fuel ratio, and either O2 or CO2 concentrations. The systems shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specifications). (PSD)

2. The owner or operator shall maintain a file of all measurements, including continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurement, maintenance, reports and records. (PSD)
3. The owner or operator shall submit a written report of all excess emissions to EPA (Attn: A-3-3) for every calendar quarter. The report shall include the following:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions. (PSD)
 - b. Specific identification of each period of excess emissions that occurs during start-ups, shutdowns and malfunctions of the cogeneration gas turbine system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted shall also be reported. (PSD)
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments. (PSD)
 - d. When no excess emission have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report. (PSD)
 - e. Excess emissions shall be defined as any three-hour period during which the

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

average emissions of NOX, as measured by the continuous monitoring system, exceeds the NOX maximum emission limits set forth in Conditions IX. C. (PSD)

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

F. Fuel Usage and Sulfur Content

Any fuel oil fired (except as provided below) shall not exceed a maximum sulfur content 0.12% (by weight). The owner or operator shall maintain records on the duration of fuel oil firing, the sulfur content, and in which operating sources fuel oil firing took place. All fuel oil receipts must be certified to 0.12% weight sulfur or less except as provided below. (PSD)

During periods of natural gas curtailment, the maximum sulfur content of the fuel oil burned shall not exceed 0.25% (by weight), provided that the gas turbine was being fired on natural gas prior to the curtailment. (PSD)

During such periods, the gas turbine NOX emission limit in Special Condition C shall not apply; NOX shall be controlled via steam injection at no less than the rate determined by the steam/fuel ratio specified for natural gas firing and no greater than the lesser of the ratio determined by the manufacturer recommended maximum steam/fuel ratio or 83,000 lb/hr at (59 degrees F). (PSD)

The owner or operator shall not consume more than 193,000 gallons of fuel oil per day or 24.4 million gallons per year when firing fuel oil. (PSD)

The owner or operator shall maintain records of the amount of fuel used in the gas turbine and auxiliary boilers, and the sulfur content of the fuel, in a permanent form suitable for inspection for EPA and the Bay Area AQMD. The record shall be maintained for at least five years following the date of its making. (PSD)

G. New Source Performance Standards

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

VI. Permit Conditions (continued)

A. Source-Specific Permit Conditions (continued)

VII. APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS

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

Table VII-A
S100 - GAS TURBINE

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NO _x	BAAQMD 9-9-305	Y		Natural Gas ≤ 21.0 ppmv @ 15% O ₂ , dry, 3-hr average Natural gas curtailment, ≤ 42 ppmv @ 15% O ₂ , dry 3-hr average	BAAQMD 9-9-501	C	CEM
	BAAQMD Permit Cond# 2780 part 1a	Y		Natural Gas or Fuel Oil ≤ 25 ppmv @ 15% O ₂ , 3-hr avg.	BAAQMD Permit Condition 2780, part 11	C	CEM
	BAAQMD Permit Cond# 2780 part 1e	Y	Upon completion of modification	Natural Gas ≤ 21.0 ppmv @ 15% O ₂ , dry, calendar day average	BAAQMD 9-9-501	C	CEM

VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

Table VII-A (continued)
S100 - GAS TURBINE

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 Permit Cond# 2780 part 1f	Y		< 323.7 tons per any twelve consecutive months	BAAQMD 9-9-501	C	CEM
	BAAQMD Permit Cond# 2780 part 1g	Y		< 1876 lb per calendar day	BAAQMD 9-9-501	C	CEM
	PSD permit, part IX-C.	Y		Natural Gas or Fuel Oil ≤ 25 ppmv @ 15% O ₂ , dry 3-hr average	BAAQMD 9-9-501	C	CEM
	PSD permit, part IX-C.	Y		Natural Gas or Fuel Oil ≤ 25 ppmv @ 15% O ₂ , dry 3-hr average	PSD permit, part IX-E.	C	CEM
NOX	NSPS, 40 CFR 60.332 (a)(1)	Y		95 ppmv, @ 15% O ₂ , dry	Monitoring requirement subsumed by PSD permit. See Permit Shield.	C	CEM
POC	BAAQMD Permit Condition 2780 part 6	Y		< 40 TPY NMHC for S100, S101, S102	BAAQMD Permit Condition 2780, part 17	C	fuel oil meter
SO2	BAAQMD 9-1-301	N		GLC ¹ of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-A (continued)
 S100 - GAS TURBINE**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
	BAAQMD 9-1-304	Y		Sulfur content of fuel <0.5% by weight		N	
	BAAQMD Permit Condition 2780 part 5	Y		Sulfur content of fuel <0.12% by weight	BAAQMD Permit Condition 2780 part 5	P/E	fuel certification by vendor
SO2	BAAQMD Permit Condition 2780 part 7	Y		Sulfur content of fuel <0.25% by weight under natural gas curtailment	BAAQMD Permit Condition 2780 part 5	P/E	fuel certification by vendor
SO2	BAAQMD Permit Condition 2780 part 10	Y		< 3087 lb/day for entire facility, except under natural gas curtailment	BAAQMD Permit Condition 2780 part 10b	P/E (during use of fuel oil only)	fuel analysis and SO2 calculation
	PSD permit, part IX-F	Y		Sulfur content of fuel <0.12% by weight	PSD permit, part IX-F	P/E	fuel certification by vendor
SO2	PSD permit, part IX-F	Y		Sulfur content of fuel <0.25% by weight under natural gas curtailment	PSD permit, part IX-F	P/E	fuel certification by vendor
	NSPS Subpart GG, 60.333 (a)	Y		Natural gas combustion: 0.015% (vol) @15% O ₂ (dry)	Monitoring requirement subsumed by Title V condition. See Permit Shield.	N	

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-A (continued)
 S100 - GAS TURBINE**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	NSPS Subpart GG, 60.333 (b)	Y		Fuel oil combustion: 0.8 % sulfur in fuel by weight	Monitoring requirement subsumed by PSD condition. See Permit Shield.	N	
TSP	BAAQMD 6-301	N		Ringelmann No. 1		N	
	BAAQMD 6-310	Y		0.15 grain/dscf @ 6% O2		N	
TSP	BAAQMD Permit Condition 2780 part 6	Y		< 25 TPY total TSP for S100, S101, S102 (natural gas combustion)	BAAQMD Permit Condition 2780 part 6c	P/M	initial source test, records
	BAAQMD Permit Condition 2780 part 6	Y		< 25 TPY total TSP for S100, S101, S102 (fuel oil combustion)	BAAQMD Permit Condition 2780 part 6a and 6b	P/E	initial source test, records
Fuel Oil usage	PSD permit, IX, F	Y		193,000 gal/day, 24.4 million gal/yr	PSD permit, IX, E	C	fuel oil meter, records
Fuel Oil usage	BAAQMD Permit Condition 2780 part 17	Y		0.55 million barrels/yr	BAAQMD Permit Condition 2780 part 9	C	fuel oil meter, records

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-A (continued)
 S100 - GAS TURBINE**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Carbon Monoxide	BAAQMD Permit Condition 2780 part 3b	Y		emissions < 100 tons/yr (entire facility)	BAAQMD Permit Condition 2780 part 11	C	CEM
Carbon Monoxide	BAAQMD Permit Condition 2780 part 3c	Y		10 ppmv @ 15% O ₂ , 3-hr average, except during startup, shutdown, operation at < 80% load, fuel oil combustion, and operation at low ambient temperature	BAAQMD Permit Condition 2780 part 11	C	CEM
Carbon Monoxide	BAAQMD Permit Condition 2780 part 3d	Y		< 14670 lbs CO during startups and shutdowns per any consecutive 12-month period	BAAQMD Permit Condition 2780 part 11	C	CEM
	BAAQMD Permit Condition 2780 part 3e	Y		< 750 hours of operation at < 80% load per any consecutive 12-month period	BAAQMD Permit Condition 2780 part 11	C	CEM
Carbon Monoxide	BAAQMD Permit Condition 2780 part 3e	Y		< 14.8 tons CO during operation at < 80% load per any consecutive 12-month period	BAAQMD Permit Condition 2780 part 11	C	CEM

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-A (continued)
 S100 - GAS TURBINE**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Permit Condition 2780 part 3f	Y		< 100 hours of operation at ambient temperatures < 35° F. per any consecutive 12-month period	BAAQMD Permit Condition 2780 part 11	C	CEM
Carbon Monoxide	BAAQMD Permit Condition 2780 part 3f	Y		15 ppm _v @ 15% O ₂ , 1-hr average, during operation at low ambient temperature	BAAQMD Permit Condition 2780 part 11	C	CEM

¹ Ground Level Concentration

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-B
 S101, S102 – BOILERS**

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	BAAQM D 9-7-301.1	Y		30 ppmv @ 3% O ₂ , dry, 3-hr average	BAAQMD Permit Condition 2780 part 11	C	CEM
	BAAQM D 9-7-302.1	Y		40 ppmv @ 3% O ₂ , dry, 3-hr average	BAAQMD Permit Condition 2780 part 11	C	CEM
	BAAQM D 9-7-303	Y		Weighted average of 9-7-301.1 and 9-7-302.1, 3-hr average	BAAQMD 9-7-501	C	Non-resettable fuel meters
	BAAQM D 9-7-305.1	Y		150 ppmv @ 3% O ₂ , dry, 3-hr average		N	
	BAAQM D 9-7-306.1	Y		150 ppmv @ 3% O ₂ , dry, 3-hr average		N	
	BAAQM D Permit Condition 2780 part 4	Y		40 ppmv @ 3% O ₂ , dry, , 3-hr average	BAAQMD Permit Condition 2780 part 11	C	CEM
	PSD permit, part IX-C.	Y		Natural Gas or Fuel Oil ≤ 40 ppmv @ 3% O ₂ , dry, 3-hr average	PSD permit, part IX-D.	C	CEM

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-B
 S101, S102 – BOILERS**

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	NSPS 40.60b (a)(1)(ii)	Y		0.2 lb/MM Btu, averaged over 24 hrs	Monitoring requirement subsumed by BACT cond. #2780, parts 3 and 11. See Permit Shield.	N	
CO	BAAQM D 9-7- 301.2	Y		400 ppmv @3%O2, dry, 3-hr average		N	
	BAAQM D 9-7- 302.2	Y		400 ppmv @3%O2, dry, 3-hr average		N	
CO	BAAQM D 9-7-303	Y		Weighted average of 9-7-301.1 and 9-7-302.1, 3-hr average	BAAQMD 9-7-501	C	Non- resettable fuel meters
	BAAQM D 9-7- 305.2	Y		400 ppmv @3%O2, dry, 3-hr average	BAAQMD 9-7-503.2	N	records
	BAAQM D 9-7- 306.2	Y		400 ppmv @3%O2, dry, 3-hr average	BAAQMD 9-7-503.3	N	records
	BAAQM D Permit Condition 2780 part 3b	Y		< 100 tons per year, entire facility	BAAQMD Permit Condition 2780 part 11	C	CEM

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-B
 S101, S102 – BOILERS**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQM D 9-1-301	N		GLC ¹ of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQM D 9-1-302	Y		300 ppm (dry)		N	
SO2	BAAQM D 9-1-304	Y		Sulfur content of fuel <0.5% by weight		N	
SO2	BAAQM D Permit Condition 2780 part 5	Y		Sulfur content of fuel <0.12% by weight	BAAQMD Permit Condition Number 2780 part 5	P/E	Fuel certification by vendor
SO2	BAAQM D Permit Condition 2780 part 7a	Y		Sulfur content of fuel <0.25% by weight under natural gas curtailment	BAAQMD Permit Condition 2780 part 5	P/E	Fuel certification by vendor
	BAAQM D Permit Condition 2780 part 10	Y		< 3087 lb/day for entire facility, except under natural gas curtailment	BAAQMD Permit Condition 2780 part 10b	P/E (during use of fuel oil only)	fuel analysis and SO2 calculation
	PSD permit, IX, F	Y		Sulfur content of fuel <0.12% by weight	PSD permit, IX, F	P/E	fuel certification by vendor

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-B
 S101, S102 – BOILERS**

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	PSD permit, IX, F			Sulfur content of fuel <0.25% by weight under natural gas curtailment	PSD permit, IX, F	P/E	fuel certification by vendor
TSP	BAAQMD Permit Condition 2780 part 6	Y		< 25 TPY TSP for S100, S101, S102	BAAQMD Permit Condition Number 2780 part 6a and 6b	P/E	initial source test, records
	BAAQMD 6-301	N		Ringelmann No. 1		N	
TSP	BAAQMD 6-310	Y		0.15 grain/dscf @ 6% O ₂		N	
POC	BAAQMD Permit Condition 2780 part 6	Y		< 40 TPY NMHC for S100, S101, S102	BAAQMD Permit Condition 2780 part 17	C	fuel oil meter
Fuel Oil usage	PSD permit, IX, F	Y		193,000 gal/day, 24.4 million gal/yr	PSD permit, IX, E	P/E	fuel oil meter, records
	BAAQMD Permit Condition 2780 part 17	Y		0.55 million barrels/yr	BAAQMD Permit Condition 2780 part 5	P/E	records

**VII. Applicable Emission limits & Compliance Monitoring Requirements
 (continued)**

**Table VII-B
 S101, S102 – BOILERS**

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

¹ Ground Level Concentration

VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally referenced in Section 600 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

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
BAAQMD 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD 9-1-304	Fuel Burning (Liquid and Solid Fuels)	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.
BAAQMD 9-7-301.1	Performance Standard, NO _x , Gaseous Fuel	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-301.2	Performance Standard, CO, Gaseous Fuel	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-302.1	Performance Standard, NO _x , Non-Gaseous Fuel	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-302.2	Performance Standard, CO, Non-Gaseous Fuel	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-305.1	Natural Gas Curtailment Performance Standard, NO _x	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-305.2	Natural Gas Curtailment Performance Standard, CO	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling

VIII. Test Methods (continued)

Table VIII (continued)

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 9-7-306.1	Equipment Testing – Non-Gaseous Fuel NOX Performance Standard	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-306.2	Equipment Testing - Non-Gaseous Fuel CO Performance Standard	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-9-305	Emission Limits- Existing Low NOx Turbines	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-9-503.2	Deadline for Demonstration of Compliance with §9-9-301	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD Cond# 2780		
part 1	NOX Limit (basis: BACT, PSD)	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 3	CO control requirement and Limit (basis: BACT)	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 4	NOx Limit (basis: PSD, BACT)	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 5	Fuel oil sulfur limit (basis: BACT)	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.
part 6	NMHC/TSP Limit (basis: Cumulative increase)	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling, and Manual of Procedures, Volume IV, ST-15, Particulates Sampling
part 7	Natural Gas Curtailment Requirement (basis: BACT, PSD)	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.

VIII. Test Methods (continued)

Table VIII (continued)

Applicable Requirement	Description of Requirement	Acceptable Test Methods
part 10	SO ₂ Limit (basis: BACT)	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
part 15	Fuel oil/NOx limit demonstration (basis: BACT)	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
NSPS Subpart GG	Standards of Performance for Stationary Gas Turbines (1/27/82)	
60.332 (a)(1)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (a)	SO ₂ Volumetric Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (b)	Fuel Sulfur Limit (gaseous fuel)	ASTM D 1072-80, Standard Method for Total Sulfur in Fuel Gases ASTM D 3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation
NSPS 40 CFR 60.8	40 CFR 60, Appendix A	EPA Method 7,-Determination of Nitrogen Oxide Emissions from Stationary Sources EPA Method 20-Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
PSD Permit		
PSD permit, part IX-C.	PSD permit, part IX-C.	EPA Method 7,-Determination of Nitrogen Oxide Emissions from Stationary Sources EPA Method 20-Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines

IX. PERMIT SHIELD

A. NON-APPLICABLE REQUIREMENTS

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

Table IX-A
S101, S102 - BOILERS

Citation	Title or Description (Reason not applicable)
NSPS Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971 (Boiler capacity below 250 million btu/hr)
NSPS Subpart Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978 (Boiler capacity below 250 million btu/hr)
NSPS Subpart Db, 40 CFR 60.42b	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, Standard for Sulfur Dioxide (Boilers were built between 6/19/84 and 6/19/86 and are exempt from this requirement per 60.40b(b)(3))
NSPS Subpart Db, 40 CFR 60.43b	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, Standard for Particulate (Boilers were built between 6/19/84 and 6/19/86 and are exempt from this requirement per 60.40b(b)(3))
NSPS Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (Boilers built before 6/9/89 and not modified or reconstructed since 6/9/89)

IX. Permit Shield (continued)

A. Non-Applicable Requirements (continued)

**Table IX-B
 S-103, No 2 Distillate Oil Storage Tank**

Citation	Title or Description (Reason not applicable)
NSPS Subpart K	Subpart K-Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 (Storage tank contains No 2 fuel oil)
Subpart Ka-	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (Storage tank contains No 2 fuel oil)
BAAQMD Regulation 8, Rule 5	Storage of Organic Liquids (Section 8-5-117: Exemption, Low Vapor Pressure)

IX. Permit Shield (continued)

B. SUBSUMED REQUIREMENTS

Pursuant to District Regulations 2-6-233 and 2-6-409.12, as of the date this permit is issued, the federally enforceable “subsumed” regulations and/or standards cited in the following table are not applicable to the source or group of sources identified at the top of the table. The District has determined that compliance with the “streamlined” requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the “subsumed” regulations and/or standards. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the “subsumed” regulatory and/or statutory provisions cited.

**Table IX-A
S100, Turbine**

Subsumed Requirement Citation	Title or Description	Streamlined Requirements	Title or Description
NSPS Subpart GG	Standards of Performance for Stationary Gas Turbines		
60.334 (a)	Fuel-to-water monitoring	PSD permit	Part IX, E: Continuous Emission Monitoring
60.334 (b)(1)	Fuel Sulfur monitoring (fuel oil)	PSD permit	Part IX, F: Fuel Usage and Sulfur Content
60.334 (b)(1)	Fuel Nitrogen Content monitoring (fuel oil)	PSD permit	Part IX, E: Continuous Emission Monitoring
60.334 (b)(2)	Fuel Sulfur and Nitrogen Content monitoring (natural gas)	Title V Condition 14299	Requirement for use of PUC quality natural gas
60.334 (c)(1)	Periods of excess emissions, NOx	PSD permit	Part IX, E: Continuous Emission Monitoring
60.334 (c)(2)	Periods of excess emissions, SO2, fuel oil	PSD permit	Part IX, F: Fuel Usage and Sulfur Content
60.334 (c)(2)	Periods of excess emissions, SO2, natural gas	Title V Condition 14299	Requirement for use of PUC quality natural gas

IX. Permit Shield (continued)

**Table IX-B
 S101-102, Boilers**

Subsumed Requirement Citation	Title or Description	Streamlined Requirements	Title or Description
NSPS Subpart A	General Provisions		
60.7(c)	Continuous Monitoring Systems	PSD Permit	Part VII, E: Continuous Emission Monitoring
60.7(d)	Summary Report Forms	PSD Permit	Part VII, E: Continuous Emission Monitoring
60.7(e)	Records	PSD Permit	Part VII, E: Continuous Emission Monitoring
60.7(f)	Notification to Local Agency	PSD Permit	Part VII, E: Continuous Emission Monitoring
60.7(g)	Special Provisions	PSD Permit	Part VII, E: Continuous Emission Monitoring
60.13	Monitoring Requirements	PSD Permit	Part VII, E: Continuous Emission Monitoring
NSPS Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units		
60.46b	Compliance and performance test methods and procedures for particulate matter and nitrogen oxides	BACT monitoring	BAAQMD Permit condition #2780, Parts 11 and 14
60.48b	Emission monitoring for particulate matter and nitrogen oxides	BACT monitoring	BAAQMD Permit condition #2780, Parts 11 and 14
60.49b	Reporting and recordkeeping requirements	BACT monitoring	BAAQMD Permit condition #2780, Parts 11 and 14

X. GLOSSARY

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CEQA

California Environmental Quality Act

CFR

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

CO

Carbon Monoxide

Cumulative Increase

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

District

The Bay Area Air Quality Management District

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District Regulations.

X. Glossary

Federally Enforceable, FE

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

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

MFR

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

MOP

The District's Manual of Procedures.

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. Contained in 40 CFR Part 61.

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.

X. Glossary

NSR

New Source Review. A federal program for preconstruction 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 by virtue of certain other characteristics (defined in Regulation 2, Rule 6) is subject to 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 of the Act.

SO₂

X. Glossary

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
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

XI. REVISION HISTORY

<u>Date</u>	<u>Action</u>	<u>Details</u>
May 12, 1998	Initial Issuance	
December 18, 1998	Significant modification	CO limit changed from destruction efficiency basis to concentration basis.
July 26, 2000	Minor modification	Replacement of components, increase in capacity and efficiency, minor increase in emissions.

XII. APPENDIX A - APPLICABLE STATE IMPLEMENTATION PLAN

See Attachments