San Diego County Air Pollution Control District

10124 Old Grove Rd
San Diego, CA 92131-1649
(858) 586-2600

TITLE V OPERATING PERMIT
APCD2024-TVP-00048

Issued To:

Pio Pico Energy Center, LLC
Site ID # APCD2010-SITE-00471

Site Address:

7363 Calzada de la Fuente
San Diego, CA 92154
(619) 344-0538

Mailing Address:

7363 Calzada de la Fuente
San Diego, CA 92154

Responsible Official – Greg Trewitt
Facility Contact – Todd Kutz
Permit Information Contact – Ian Fudalski

Issued by the San Diego County Air Pollution Control District TBD.

on This Title V Operating Permit expires on TBD.

Signed by: TBD

Mohsen Nazemi, MS, PE. Date
Chief, Engineering Division
San Diego County Air Pollution Control District

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PREAMBLE

This Title V Operating Permit consists of this document and all appendices, including District permits incorporated by reference. The facility is subject to all applicable requirements identified within this permit, unless a specific permit shield is specified within this permit. If an applicable requirement is omitted from this permit, the facility is still obligated to comply with such an applicable requirement. The permittee must comply with all of the terms listed in each section of this permit.

This permit contains five major sections: Section I contains the Regulation XIV requirements required to carry out the Title V Operating Permit program. Section II contains the requirements that are applicable to the facility on a facility-wide basis. Section III contains the requirements that are applicable to individual emission units which have been issued District permits or District registration, or which have been determined to be insignificant emission units. Section IV contains terms and requirements pertaining to variance procedures and compliance schedules, if applicable to the facility. Section V contains three appendices. Appendix A contains all the District permits incorporated within this permit. Appendix B contains a table of all SIP approved and District approved rules. Appendix C contains a list of abbreviations used within this permit.

Copies of the Rules and Regulations of the Air Pollution Control District of San Diego County and the Rules and Regulations for San Diego County contained in the State Implementation Plan (SIP) approved by EPA may be obtained at the District. Copies are also available for review at the following locations:

SD Air Pollution Control District
10124 Old Grove Rd
San Diego, CA 92131-1649
(858) 586-2600

The current Rules and Regulations of the Air Pollution Control District of San Diego County may also be viewed and downloaded using the following internet address:
https://www.sdapcd.org/content/sdapcd/rules.html

The following addresses should be used to submit any certifications, reports or other information required by this permit:

SD Air Pollution Control District
Compliance Division
10124 Old Grove Rd
San Diego, CA 92131-1649

USEPA Region IX
ECAD Attn: ENF 2-1
75 Hawthorne Street
San Francisco, CA 94105

SECTION I. REGULATION XIV PERMIT REQUIREMENTS

A. ADMINISTRATIVE PERMIT TERMS

1. This Title V Operating Permit expires 5 years from date of issuance. [Rule 1410]
2. Commencing or continuing operation under this permit to operate shall be deemed acceptance of all terms and conditions specified within this permit. This does not limit the right of the applicant to seek judicial review or seek federal EPA review of a permit term or condition. [Rule 1421]
3. This permit may be modified, revoked, reopened and reissued, or terminated by the District for cause. [Rule 1421]
4. 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 noncompliance does not stay the applicability of any permit condition. [Rule 1421]
5. This permit does not convey any property rights of any sort, or any exclusive privilege. [Rule 1421]
6. The need for the permittee to halt or reduce a permitted activity in order to maintain compliance with any term or condition of this permit shall not be a defense for any enforcement action brought as a result of a violation of any such term or condition. [Rule 1421]
7. In the event of challenge to any portion of this permit, the rest of the permit remains valid. [Rule 1421]
8. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any applicable requirement in this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [Rule 1421]

B. RENEWAL REQUIREMENTS AND TERMS

1. The permittee shall submit a complete application for renewal of this permit to the Air Pollution Control Officer at least 12 months, but not more than 18 months, prior to permit expiration. [Rule 1410]
2. If an administratively complete application for renewal of this permit has been submitted to the Air Pollution Control Officer within the timeframe specified in Section I.B.1. , the terms and conditions of this permit shall remain in effect and the source may continue operations under these terms and conditions until the Air Pollution Control Officer issues or denies the permit renewal. [Rule 1410]

C. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

1. The permittee shall provide the District access to the facility and all equipment subject to this permit, and access to all required records pursuant to California Health and Safety Code Section 41510. [Rule 1421]

2. The permittee shall maintain all records required by this permit including any calibration, maintenance, and other supporting information and copies of all reports required by this permit for at least five (5) years from their date of creation. Such records shall be maintained on-site for a minimum of three years. This requirement controls and supersedes any other record retention requirement under this permit as it pertains to, and is required by, District Rule 1421 and Title V of the Clean Air Act. [Rule 1421
3. Records required by this permit shall be considered as being maintained "on-site" if records for the previous 12-month period are available at the stationary source and any additional records are maintained at a location to be specified by the source and made readily available to the District upon request. [Rule 21]
4. The permittee shall submit monitoring and recordkeeping summary reports and all other monitoring and recordkeeping reports required by this permit to the District every six months, unless a shorter time frame is required by a specific permit condition contained in Section III of this permit. Unless other dates are specified in Section III, reports for data required to be collected from January 1 through June 30, shall be submitted no later than September 1 of the calendar year, and reports for data required to be collected from July 1 through December 31, shall be submitted no later than March 1 of the following calendar year. The report for the final six months of the year may be consolidated with the annual compliance certification required below. All instances of noncompliance from federally enforceable applicable requirements shall be clearly identified in these reports. (Timely completion of District Certification Reports Form 1401-J1 and Form 1401-J2, if applicable, and all indicated attachments, fulfills the requirements of this condition.) [Rule 1421]

5. Each calendar year, the permittee shall submit to the District and to the federal EPA an annual compliance certification, in a manner and form approved in writing by the District, for the previous calendar year that includes the identification of each applicable term or condition of the final permit for which the compliance status is being certified, the compliance status and whether the facility was in continuous or intermittent compliance during the previous calendar year, identification of the method used to determine compliance during the previous calendar year, and any other information required by the District to determine the compliance status. The annual compliance certification for a calendar year shall be submitted no later than March 1 of the following calendar year and may be consolidated with the monitoring and recordkeeping report for the last six months of the year for which compliance is certified. (Timely completion of District Certification Reports Form 1401-J1 and Form 1401-J2, if applicable, and all indicated attachments, fulfills the requirements of this condition.) [Rule 1421]
6. Any report submitted to the District or federal EPA pursuant to this permit to comply with a federally enforceable applicable requirement, shall be certified by a responsible official stating that, based on information and belief formed after reasonable inquiry, the report is true, accurate and complete. [Rule 1421]

7. The permittee shall make any trade secret designations of records, documents, or other information submitted to the District or federal EPA in accordance with District Rule 176. [Rule 176]

8. The permittee shall report all deviations from any and all federally enforceable permit terms and conditions including: (a) breakdowns, whether or not they result in excess emissions, (b) deviations that result in excess emissions of any regulated air pollutant, and (c) deviations from monitoring, recordkeeping, reporting and other administrative requirements that do not result in excess emissions. For deviations that result from breakdowns under District Rule 98, the permittee shall report the breakdown within two hours of detection of the breakdown and provide a follow-up written report after corrective actions have been taken. For deviations not due to a breakdown but which result in excess emissions, the permittee shall report the deviation within ten calendar days of detection. For all other deviations where no specific time frame for reporting a deviation applies, the permittee shall report the deviation at the time of the next semi-annual monitoring summary or annual compliance certification, whichever occurs first. If an underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, then the criteria for the applicable requirement shall apply. The report must include the probable cause of such deviations and any corrective actions or preventive measures taken. [Rule 1421]

D. GENERAL PERMIT REQUIREMENTS

1. The permittee shall comply with all terms and conditions of this permit. This permit consists of this document and Appendices A, B and C. Any noncompliance with the federally applicable terms and conditions of this permit shall constitute a violation of the federal Clean Air Act. Noncompliance with any federally applicable permit term or condition of this permit is grounds for federal enforcement action or enforcement action by the District; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Noncompliance with any District permit term or condition is grounds for enforcement action by the District. [Rule 1421]

2. Upon a written request by the District, the permittee shall furnish to the District any information needed to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit; any information required to determine compliance with this permit; or any records required to be maintained pursuant to this permit. Such information shall be provided within a reasonable time, as specified within the District's written request. [Rule 1421]

3. The permittee shall pay annual fees in accordance with District Rule 40. [Rule 1421]

4. The permittee shall provide access, facilities, utilities and any necessary safety equipment for source testing and inspection upon request from the District. [Rule 19]

5. This permit shall be maintained on-site at all times and be made available to the District upon request. [Rule 1410]

6. The Rule Reference Table provided in Appendix B shall be used to determine whether a cited rule is a federally and District enforceable requirement or a District only enforceable requirement. Any new or revised District rule shall not be considered

federally enforceable until the rule is approved by EPA into the SIP. In cases where SIP approval is pending for a revised District rule, the rule citation shall refer to both the current SIP approved rule and the revised District rule. [Rule 1421]

SECTION II. FACILITY-WIDE REQUIREMENTS

A. GENERAL PERMIT PROGRAM APPLICABLE REQUIREMENTS

The permittee shall comply with the applicable requirements specified in the Rules and Regulations cited below, unless specifically exempted by the same Rule or Regulation.

Regulation	Rule Citation	Title
SDCAPCD Reg. II	10(a) 10(b)	Permits Required – (a) Authority to Construct Permits Required – (b) Permit to Operate
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities
SDCAPCD Reg. II	19.3	Emission Information
SDCAPCD Reg. II	20, 20.1, 20.2, 20.3	New Source Review
SDCAPCD Reg. II	21	Permit Conditions
SDCAPCD Reg. II	24	Temporary Permit to Operate
SDCAPCD Reg. II	25	Appeals
SDCAPCD Reg. IV	60	Circumvention
SDCAPCD Reg. IV	71	Abrasive Blasting
SDCAPCD Reg. V	98*	Breakdown Conditions: Emergency Variance
SDCAPCD Reg. VI	101	Burning Control
SDAPCD Reg. VIII	131	Stationary Source Curtailment Plan
40 CFR Part 68	Part 68	Risk Management Plan (Ammonia Storage)
40 CFR Part 82	Subpart B	Servicing of Motor Vehicle Air Conditioners
40 CFR Part 82	Subpart F	Recycling and Emissions Reducing
40 CFR Part 89	Part 89	VOC Standards for Consumer Products

**Breakdowns/variances are not recognized by EPA and cannot grant relief from federal enforcement of requirements.*

B. GENERAL PROHIBITORY REQUIREMENTS

The permittee shall comply with the generally applicable requirements specified in the Rules and Regulations cited below, unless specifically exempted by the same Rule or Regulation. These generally applicable requirements apply on a facility-wide basis to all permitted equipment, registered equipment, and insignificant activities. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more permitted emission units, the requirement is also included in Section III.A. of this permit.

Regulation	Rule Citation	Title
SDCAPCD Reg. II	19.2	Continuous Emission Monitoring Requirements
SDCAPCD Reg. IV	50	Visible Emissions
SDCAPCD Reg. IV	51	Nuisance
SDCAPCD Reg. IV	52	Particulate Matter
SDCAPCD Reg. IV	53	Specific Contaminants
SDCAPCD Reg. IV	62	Sulfur Content of Fuels
SDCAPCD Reg. IV	67.0.1	Architectural Coatings
SDCAPCD Reg. IV	67.17	Storage of Organic Materials Containing VOC
SDCAPCD Reg. XII	1200****	Toxic Air Contaminants – New Source Review
SDCAPCD Reg. XII	1206**	Asbestos Removal, Renovation, and Demolition
40 CFR Part 60	Subpart A***	NSPS General Provisions
40 CFR Part 63	Subpart A***	NESHAP General Provisions
40 CFR Part 61	Subpart M**	NESHAP - Asbestos
40 CFR Part 73	Part 73	Sulfur Dioxide Allowance System
40 CFR Part 74	Part 74	Acid Rain

The District issued its own Asbestos Rule 1206 intended to be as stringent as Subpart M. The facility is subject to the most stringent requirements of either rule, which at the time of this report is ensured by compliance with Rule 1206.The District has adopted these rules by reference; however, any changes made to these regulations at the federal level are not immediately adopted. In the event this creates a conflict between the District adopted and federal rules, the more stringent requirements will apply.*

*****Not federally enforceable*

C. PERMIT SHIELDS

1. No permit shield applies.

D. ADDITIONAL TERMS

1. Any emission unit described in this Title V operating permit as being fired on natural gas, shall only use Public Utility Commission (PUC)-quality natural gas, unless the emission unit permit specifies otherwise. [Rules 53, 62]
2. The permittee shall comply with all applicable requirements, including but not limited to, those applicable requirements of 40 CFR Parts 60 and 63.

E. TITLE IV (ACID RAIN) REQUIREMENTS

1. The permittee shall not exceed any emission allowances that are lawfully held under Title IV of the federal Clean Air Act or the regulations promulgated thereunder. [Rule 1421]

2. The permittee shall install, operate, and maintain equipment for the determination of CO2 and NOx emissions on each applicable exhaust stack in accordance with 40 CFR Parts 72 and 75. [40 CFR Parts 72 and 75.10(a)]
3. The permittee shall prepare and maintain onsite a written Quality Assurance program in accordance with 40 CFR Part 75, Appendix B for the continuous monitoring of NOx emissions from each applicable exhaust stack. The components of the Quality Assurance program include, but are not limited to, procedures for daily calibration testing, quarterly linearity testing, recordkeeping and reporting implementation, and relative accuracy testing. [40 CFR Parts 72 and 75]
4. The permittee shall monitor SO2 emissions in accordance with 40 CFR Part 72 and 75. [40 CFR Parts 72 and 75]
5. The permittee shall submit quarterly electronic data reports to EPA for the emissions from each applicable exhaust stack in accordance with 40 CFR Part 75. These reports must be submitted within 30 days following the end of each calendar quarter and shall include all information required in § 75.64. [40 CFR Part 75]

SECTION III. EMISSION UNIT REQUIREMENTS

A. DISTRICT PERMITTED EMISSION UNITS

Facility Emission Units (EU) are listed below and attached in Appendix A, including all terms and conditions of such permits, and comprise the emission unit portion of this Title V Operating Permit.

EU Reference	Source
APCD2024-PTO-004834	Natural Gas Turbine Engine Generator
APCD2024-PTO-004835	Natural Gas Turbine Engine Generator
APCD2024-PTO-004836	Natural Gas Turbine Engine Generator

B. REGISTERED AND LEASED EMISSION UNITS

The permittee shall comply with the source specific applicable requirements specified in the Rules and Regulations cited below for all registered emission units, unless specifically exempted by the same Rule or Regulations.

Regulation	Rule Citation	Title
SDCAPCD Reg. II	19.2	Continuous Emission Monitoring Requirements
SDCAPCD Reg. II	NSR	New Source Review
SDCAPCD Reg. IV	52	Particulate Matter
SDCAPCD Reg. IV	53	Specific Contaminants
SDCAPCD Reg. IV	54	Dust and Fumes
SDCAPCD Reg. IV	62	Sulfur Content of Fuels

C. INSIGNIFICANT EMISSION UNITS AND ACTIVITIES

The permittee shall comply with the applicable requirements specified in the District Rules and Regulations for any Insignificant Units located at this facility that are listed at District Regulation XIV, Appendix-A (no insignificant units were listed in the permittee's application).

SECTION IV. DISTRICT-ONLY PROVISIONS

VARIANCE PROCEDURES

The permittee may seek relief from District enforcement action from District-only provisions in the event of a breakdown in accordance with District Rule 98. Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance does not provide relief from federal enforcement or citizen's suits. [Rule 98]

SECTION V. APPENDICES

APPENDIX A: EMISSION UNITS – SPECIFIC CONDITIONS

EU Reference	Source
APCD2024-PTO-004834	Natural Gas Turbine Engine Generator
APCD2024-PTO-004835	Natural Gas Turbine Engine Generator
APCD2024-PTO-004836	Natural Gas Turbine Engine Generator

San Diego County Air Pollution Control District

COUNTY OF SAN DIEGO, AIR POLLUTION CONTROL DISTRICT
10124 OLD GROVE ROAD, SAN DIEGO, CA 92131
PHONE (858) 586-2600 Fax (858) 586-2601
www.sdapcd.org

Sectors: 5, S
Site ID: APCD2010-SITE-00471
App ID: APCD2017-APP-005036

PERMIT ID
APCD2024-PTO-004834

Pio Pico Energy Center, LLC
Plant Manager Jason King
7363 Calzada de la Fuente
San Diego CA, 92154

EQUIPMENT ADDRESS
Pio Pico Energy Center, LLC
Plant Manager Jason King
7363 Calzada de la Fuente
San Diego CA 92154

PERMIT TO OPERATE

This permit is not valid until required fees are received by the District.

The above is hereby granted a Permit To Operate the article, machine, equipment or contrivance described below. This permit is not transferable to a new owner nor is it valid for operation of the equipment at another location except as specified. This Permit To Operate or copy must be posted on or within 25 feet of the equipment, or readily available on the operating premises.

EQUIPMENT OWNER

Pio Pico Energy Center, LLC 7363 Calzada de la Fuente, San Diego, CA 92154

EQUIPMENT DESCRIPTION

Turbine No. 1: A natural-gas-fired, simple-cycle, intercooled GE LMS100 PA combustion turbine generator rated at 1000 MMBtu/hr (HHV) heat input and 106.4 MW, Serial Number 878165, equipped with an evaporative cooler for the inlet air; a compressor intercooler utilizing a heat exchanger and a shared partial dry cooling system with a wet surface air cooler; a continuous emission monitoring system (CEMS) for NOx, O2, and CO; a data acquisition and handling system (DAHS) to record key operational parameters; water injection; a selective catalytic reduction system (SCR); an ammonia vaporization system, and an oxidation catalyst.

Every person who owns or operates this equipment is required to comply with the conditions listed below and all applicable requirements and District rules, including but not limited to Rules 10, 20, 40, 50, 51.

Fee Schedules: 1 [93A] Test Witness and Report Review (T&M)
1 [20F] Non- Aircraft Turbine Engine

BEC: APCD2024-CON-002082

FAILURE TO OPERATE IN COMPLIANCE IS A MISDEMEANOR SUBJECT TO CIVIL AND CRIMINAL PENALTIES

A. FEDERALLY-ENFORCEABLE AND DISTRICT-ENFORCEABLE CONDITIONS

1. This equipment shall be properly maintained and kept in good operating condition at all times, and, to the extent practicable, the owner or operator shall maintain and operate the equipment and any associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. [Rule 21 and/or 40 CFR §60.11]
2. A rolling 12-calendar-month period is one of a series of successive consecutive 12-calendar-month periods. The initial 12-month-calendar period of such a series shall begin on the first day of the month in which the applicable beginning date for that series occurs as specified in this permit. [Rule 20.3(d)(1), Rule 20.3(d)(3), Rule 21].
3. The permittee shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances. [40 CFR Part 73]

4. All records required by this permit shall be maintained on site for a minimum of five years and made available to the District upon request. [Rule 1421]
5. Unless otherwise defined for purposes of a specific condition, for purposes of determining compliance with the emission limits of this permit, a shutdown period is the 11-minute period preceding the moment at which fuel flow ceases. [Rule 20.3(d)(1)]
6. A startup period is the period of time that begins when fuel flows to the combustion turbine following a non-operational period. Unless otherwise defined for purposes of a specific condition, for purposes of determining compliance with the emission limits of this permit, the duration of a startup period shall not exceed 30 consecutive minutes. [Rule 20.3(d)(1)]
7. A non-operational period is any five-consecutive-minute period when fuel does not flow to the combustion turbine. [Rule 20.3(d)(1)]
8. A Continuous Emission Monitoring System (CEMS) protocol is a document approved in writing by the District that describes the methodology and quality assurance and quality control procedures for monitoring, calculating, and recording stack emissions from the combustion turbine that is monitored by the CEMS. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]
9. For each combustion turbine, a unit operating day, hour, and minute mean the following:
   a. A unit operating day means any calendar day in which the turbine combusts fuel.
   b. A unit operating hour means any clock hour in which the turbine combusts fuel.
   c. A unit operating minute means any clock minute in which the turbine combusts fuel.
   [Rule 21, 40 CFR Part 75, Rule 20.3(d)(1), 40 CFR Part 60 Subpart KKKK]
10. Tuning is defined as adjustments to the combustion or emission control system that involves operating the combustion turbine or emission control system in a manner such that the emissions control equipment may not be fully effective or operational. Only one gas turbine shall be tuned at any given time. Tuning events shall not exceed 720 unit operating minutes in a calendar day nor exceed 40 hours in a calendar year for each turbine. The District compliance division shall be notified at least 24 hours in advance of any tuning event. For purposes of this condition, the number of hours of tuning in a calendar year is defined as the total unit operating minutes of tuning during the calendar year divided by 60. [Rule 20.3(d)(1)]
11. The exhaust stacks for each combustion turbine shall be at least 100 feet in height above site base elevation and with an interior exhaust stack diameter of no more than 14.5 feet at the point of release unless it is demonstrated to the District that all requirements of District Rules 20.3 and 1200 are satisfied with a different stack configuration. [Rules 20.3(d)(2) and 1200]
12. The combustion turbines shall be fired on Public Utility Commission (PUC) quality natural gas. The permittee shall maintain, on site, quarterly records of the natural gas sulfur content expressed in units of grains of sulfur per 100 dscf of natural gas and hourly records of the higher heating values of the natural gas expressed in units of Btu/scf. These records shall be provided to District personnel upon request. Natural gas sulfur content records must be kept with a minimum reporting limit of 0.25 grains sulfur compounds per 100 dscf of natural gas. [Rule 20.3(d)(1)]
13. Unless otherwise specified in this permit, all continuous monitoring data shall be collected at least once every clock-minute. [Rules 69.3.1, and 20.3(d)(1)]
14. For purposes of determining compliance with emission limits based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on a Continuous Emission Monitoring System (CEMS), data collected in accordance with the CEMS protocol shall be used and the averages for averaging periods specified herein shall be calculated as specified in the CEMS protocol. [Rules 69.3.1, 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]
15. For purposes of determining compliance with emission limits based on CEMS data, all CEMS calculations, averages, and aggregates shall be performed in accordance with the CEMS protocol approved in writing by the District. [Rules 69.3.1, 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]

16. For each emission limit expressed as pounds, pounds per hour, or parts per million based on a one-hour or less averaging period or compliance period, compliance shall be based on using data collected at least once every minute when compliance is based on CEMS data except as specified in the District-approved CEMS Protocol. [Rules 69.3.1, and 20.3(d)(1)]
17. When a combustion turbine is combusting fuel (operating), the emission concentration of oxides of nitrogen (NOx), calculated as nitrogen dioxide (NO2), shall not exceed 2.5 ppmvd corrected to 15% oxygen averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 20.3(d)(1)]
18. When a combustion turbine is operating, the emission concentration of carbon monoxide (CO) shall not exceed 4.0 ppmvd corrected to 15 % oxygen, averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 20.3(d)(1)]
19. When a combustion turbine is operating, the volatile organic compound (VOC) concentration, calculated as methane, measured in the exhaust stack, shall not exceed 2.0 ppmvd corrected to 15% oxygen, averaged over a 1-clock-hour period, except during tuning operations, startup periods, and any clock minutes that are not excluded from shutdown periods for that turbine. For purposes of determining compliance based on source testing, an average of three subtests shall be used. [Rule 20.3(d)(1)]
21. When a combustion turbine is operating with post-combustion air pollution control equipment that controls oxides of nitrogen (NOx) emissions, the emission concentration NOx, calculated as nitrogen dioxide (NO2), shall not exceed 13.9 ppmvd averaged over each one-clock-hour period and corrected to 15% oxygen, except for startup and shutdown periods for that turbine, as defined in Rule 69.3.1. [Rule 69.3.1]
22. When a combustion turbine is operating without any post-combustion air pollution control equipment that controls oxides of nitrogen (NOx) emissions, the emission concentration of NOx calculated as nitrogen dioxide (NO2) from each turbine shall not exceed 23.2 ppmvd averaged over each one-clock-hour period and corrected to 15% oxygen, except for startup and shutdown periods for that turbine, as defined in Rule 69.3.1. [Rule 69.3.1]
23. For each rolling four-unit-operating-hour period, average emission concentration of oxides of nitrogen (NOx) for each turbine calculated as nitrogen dioxide (NO2) in parts per million by volume dry (ppmvd) corrected to 15% oxygen or, alternatively, as elected by the permittee, the average NOx emission rate in pounds per megawatt-hour (lb/MWh) shall not exceed an average emission limit calculated in accordance with 40 CFR Section 60.4380(b)(3). The emission concentration and emission rate averages shall be calculated in accordance with 40 CFR Section 60.4380(b)(1). The average emission concentration limit and emission rate limit shall be based on an average of hourly emission limits over the four-unit-operating-hour period including the operating-hour and three-unit-operating-hours immediately preceding. For any unit-operating-hour where multiple emission standards would apply based on load of the turbine, the applicable standard shall be the higher of the two limits. The hourly emission concentration limit and emission rate limit shall be as follows based on the load of the turbine over the four-unit-operating-hour period:

Case	Emission Limit, ppmvd at 15% O2	Emission Limit, lb/MWh
i. All four hours at or above 75% Load	15	0.43
ii. All four hours below 75% Load	96	4.7
iii. Combination of hrs	(a x 15+b x 96)/4	(a x 0.43+b x 4.7)/4

Where: a = the number of unit operating hours in the four-hour period with all operation above 75% load and b = 4-a.

The averages shall include emissions during all times that the equipment is operating including, but not limited to, emissions during startup and shutdown periods. For each six-calendar-month period, emissions in excess of these limits and monitor downtime shall be identified in accordance with 40 CFR Sections 60.4350 and 60.4380(b)(2), except that Section 60.4350(c) shall not apply for identifying periods in excess of a NOx concentration limit. For the purposes of this condition, unit-operating-hour shall have the meaning as defined in 40 CFR 60.4420. [40 CFR Part 60 Subpart KKKK]

24. The emissions of particulate matter less than or equal to 10 microns in diameter (PM10) from the exhaust stack of each combustion turbine shall not exceed 5.0 pounds per hour for each combustion turbine. Compliance with this limit shall be demonstrated based upon source testing and calculated as the average of three subtests. [Rule 20.3(d)(1) and (d)(2)]

25. The emissions of particulate matter less than or equal to 10 microns in diameter (PM10) from the exhaust stacks of the combustion turbines shall not exceed 3.5 pounds per hour per turbine, calculated as the arithmetic average of the source test results from the six most recent sets of valid source tests performed on the three turbines. For the purpose of this condition, a valid source test is a source test for which the results have been approved by the District, and that included at least three subtests in the calculation of average emission rate. [Rule 20.3(d)(1) and (d)(2)]

26. The discharge of particulate matter from the exhaust stack of each combustion turbine shall not exceed 0.10 grains per dry standard cubic foot (0.23 grams/dscm) corrected to 12% carbon dioxide by volume. The District may require periodic testing to verify compliance with this standard. [Rule 53]

27. Visible emissions from the lube oil vents and the exhaust stack of each combustion turbine shall not exceed 20% opacity for more than three (3) minutes in any period of 60 consecutive minutes. [Rule 50]

28. Mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits, except during tuning, startup, and shutdown periods for that turbine. A one-clock-hour averaging period for these limits shall be used when compliance is determined using CEMS data.

Pollutant	Emission Limit, lb/hour
a. NOx	8.2
b. CO	8.0
c. VOC	2.3

[Rule 20.3(d)(2)]

29. Cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's tuning operations.

Pollutant	Emission Limit, lbs/hr
a. NOx	45.6
b. CO	75.0

[Rule 20.3(d)(1)]

30. Excluding any minutes that are coincident with a shutdown period, cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's startup periods.

Pollutant	Emission Limit, lb/event
a. NOx	22.5
b. CO	17.9
c. VOC	4.7

[Rule 20.3(d)(1)]

31. Cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's shutdown periods.

Pollutant	Emission Limit, lb/event
a. NOx	6.0
b. CO	47.0
c. VOC	3.0

[Rule 20.3(d)(1)]

32. The total aggregate oxides of nitrogen (NOx) emissions from all combustion turbines combined shall not exceed 150 pounds per hour, calculated as nitrogen dioxide and measured over each one-clock-hour period. This emission limit shall apply during all times one or more turbines are operating, including, but not limited to, emissions during tuning, startup, and shutdown periods. [Rule 20.3(d)(2)]

33. The carbon monoxide (CO) emissions from each combustion turbine shall not exceed 75 pounds per hour and total aggregate CO emissions from all combustion turbines combined shall not exceed 225 pounds per hour measured over each one-clock-hour period. This emission limit shall apply during all times that one or more turbines are operating, including, but not limited to emissions during tuning, startup, and shutdown periods. [Rule 20.3(d)(2)(i)]

34. Aggregate emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide (NO2); carbon monoxide (CO); volatile organic compounds (VOCs), calculated as methane; particulate matter less than or equal to 10 microns in diameter (PM10); and oxides of sulfur (SOx), calculated as sulfur dioxide (SO2), from the combustion turbines authorized to be constructed under this permit, except emissions from emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1), as it exists on the date the permit to operate for this equipment is approved, shall not exceed the following limits for each rolling 12- calendar-month period:

Pollutant	Emission Limit, tons per year
a. NOx	70.4
b. CO	96.4
c. VOC	19.4
d. PM10	35.8
e. SOx	4.1

The aggregate emissions of each pollutant shall include emissions during all times that the equipment is operating including, but not limited to, emissions during tuning, startup, and shutdown periods. All calculations performed to show compliance with these limits shall be performed according to a protocol approved in advance in writing by the District. [Rules 20.3(d)(2), 20.3(d)(3), 20.3(d)(5), 20.3(d)(8) and 21]

35. The wet surface air cooler (WSAC) shall be equipped with a mist eliminator designed to achieve a drift rate of 0.001% or less. In addition, the maximum total dissolved solids (TDS) concentration of the air-side recirculating cooling water used in the WSAC shall not exceed 5,600 ppm. The TDS concentration shall be verified through calendar quarterly testing of the water by a certified lab using an EPA approved method. In addition, emissions of PM10 from the WSAC shall not exceed 1.46 tons for each rolling 12-calendar-month period. For each calendar month, PM10 emissions from the WSAC shall be calculated using a District approved protocol that is based on either the design maximum air-side recirculating cooling water flow to the WSAC or the measured total air-side recirculating water flow to the WSAC during the calendar month; the design maximum drift rate; the TDS concentration from the calendar quarterly measurement for the calendar quarter that contains the month; and the actual hours of operation of the WSAC fans during the calendar month. Except for the TDS concentration, for which the owner or operator shall maintain records not less frequently than a calendar quarterly basis, the owner or operator shall maintain records not less frequently than a calendar monthly basis of each variable parameter necessary to calculate the WSAC PM10 emissions with the District approved protocol methodology including, but not limited to, the recirculating air-side cooling water flow rate and actual hours of operation of the WSAC fans, if applicable. [Rule 20.3(d)(1)]

36. For each calendar month and each rolling 12-calendar-month period, the owner or operator shall maintain records, as applicable, on a calendar monthly basis, of mass emissions during each calendar month and rolling 12-calendar month period of NOx, calculated as NO2; CO; VOCs, calculated as methane; PM10; and SOx, calculated as SO2, in tons, from each emission unit located at this stationary source, except for emissions from emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1) as it exists on the date the permit to operate for this equipment is approved. These records shall be made available for inspection within 15 calendar days after the end of each calendar month. The recorded emissions shall be calculated in accordance with an emission calculation protocol approved by the District. Where applicable, this protocol may rely in whole or in part on the CEMS Protocol or other monitoring protocols required by this permit. [Rules 20.3(d)(3), 20.3(d)(8) and 21]

37. The associated ammonia vaporizer system shall be operated and maintained in accordance with the manufacturer's instructions and shall begin operating as soon as feasible before a turbine startup period begins and be fully operational at all times when a combustion turbine is operating. [Rules 20.3(d)(1) and 21]

38. When a combustion turbine is operating, ammonia shall be injected at all times provided that all of the following are satisfied:
a. The associated selective catalytic reduction (SCR) system catalyst inlet temperature is 570 degrees Fahrenheit (°F) or greater;
b. The associated ammonia vaporizer system air heater exit temperature has attained 300 °F or greater after the beginning of the startup period and is greater than 250 °F during continuous operations;
c. The associated ammonia vaporizer system ammonia-air mixing header exit temperature has attained 275 °F or greater after the beginning of the startup period and is greater than 215 °F during continuous operations.
For purposes of this condition, the SCR inlet temperature shall be determined as the smallest of the temperatures measured by the SCR inlet temperature monitors including only those monitors that are fully operational and measuring temperature within their specified accuracy. [Rules 20.3(d)(1) and 21]

39. Continuous monitors shall be installed on each SCR system and associated ammonia vaporizer system to monitor or calculate, as applicable, and record each unit operating minute the ammonia solution injection rate in pounds per hour, the SCR inlet temperature at three points at the inlet to the SCR in degrees Fahrenheit (°F), the ammonia vaporizer system air heater exit temperature in °F, and ammonia-air mixing header exit temperature in °F. The monitors shall be calibrated, maintained, and operated in accordance with a District approved protocol, which may be part of the CEMS Protocol. If the District has not approved any protocol the monitors shall be calibrated, maintained, and operated in accordance with the manufacturer's instructions until the date that a District approved protocol is in effect. The monitors shall be in full operation at all times when the turbine is in operation. [Rules 20.3(d)(1)]

40. Except during periods when the ammonia injection system is being tuned or one or more ammonia injection systems is in manual control for compliance with applicable permit conditions, the automatic ammonia injection system serving each SCR system shall be in operation in accordance with manufacturer's specifications at all times when ammonia is being injected into the SCR system. Manufacturer specifications shall be maintained on site and made available to District personnel upon request. [Rules 20.3(d)(1), 21]

41. The concentration of ammonia solution used in the ammonia injection system shall be less than 20% ammonia by weight. Records of ammonia solution concentration shall be maintained on site and made available to district personnel upon request

42. All source test or other tests required by this permit shall be performed by the District or performed by an independent contractor and witnessed and approved by the District. Unless otherwise specified in this permit or authorized in writing by the District, a proposed test protocol shall be submitted to the District for written approval at least 45 calendar days prior to source testing for all testing performed by an independent contractor. Additionally, the District shall be notified a minimum of 30 calendar days prior to the test so that observers may be present unless otherwise authorized in writing by the District. [Rules 20.2(d)(1) and 1200 and 40 CFR Part 60 Subpart GG and 40 CFR §60.8]

43. The owner or operator of this equipment shall submit a source test protocol to measure concentrations and mass emissions of Volatile Organic Compounds (VOCs), including formaldehyde, during startup and shutdown conditions at least 45 days prior to conducting this test. Measurement of VOC emissions shall be conducted in accordance with EPA Method 18, or alternative methods approved by the District and EPA. Measurement of emissions of formaldehyde shall be conducted in accordance with EPA Method 316 or 323, or an alternative method approved by the District and EPA. This test shall be conducted on the same dates as the first RATA and source test performed for each turbine conducted during each five-year Title V Permit term. [Rule 20.3]

44. Unless otherwise specified in this permit or authorized in writing by the District, within 45 days after completion of a source test or Relative Accuracy Test Audit (RATA) performed by an independent contractor, a final test report shall be submitted to the District for review and approval. [Rules 20.3(d)(1) and 1200 and 40 CFR Part 60 Subpart KKKK, 40 CFR §60.8, and 40 CFR Part 75]

45. A renewal source test and a NOx and CO Relative Accuracy Test Audit (RATA) shall be periodically conducted on each combustion turbine to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit and applicable relative accuracy requirements for the CEMS systems using District-approved methods. The renewal source test and the NOx and CO RATAs shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR 75, Appendix B, Sections 2.3.1 and 2.3.3. The renewal source test shall be conducted in accordance with a protocol complying with all the applicable requirements of the source test protocol for the Initial Emissions Source Test. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

46. Each combustion turbine shall be source tested to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit. The source test protocol shall comply with all of the following requirements:

    a. Measurements of NOx and CO concentrations and emissions and oxygen (O2) concentration shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) methods 7E, 10, and 3A, respectively, and District source test Method 100, or alternative methods approved by the District and EPA;
    b. Measurement of VOC concentrations and emissions, except for formaldehyde, shall be conducted in accordance with EPA Method 18, or an alternative method approved by the District and EPA;
    c. Measurement of formaldehyde concentrations and emissions shall be conducted in accordance with EPA Method 316 or 323, as specified by the District, or an alternative method approved by the District and EPA;
    d. Total VOC concentrations and emissions shall be the sum of those concentrations and emissions determined using Method 18 and the formaldehyde concentrations and emissions;
    e. Measurements of ammonia concentrations shall be conducted in accordance with Bay Area Air Quality Management District Method ST-1B or an alternative method approved by the District and EPA;
    f. Measurements of PM10 emissions shall be conducted in accordance with EPA Methods 201A and 202, or EPA Methods 5 and 202 (reporting PM as PM10), or an alternative method approved by the District and EPA;
    g. Source testing shall be performed at the normal load level, as specified in 40 CFR Part 75 Appendix A Section 6.5.2.1 (d), provided it is not less than 80% of the combustion turbine's rated load unless it is demonstrated to the satisfaction of the District that the combustion turbine cannot operate under these conditions. If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous power level. The District may specify additional testing at different load levels or operational conditions to ensure compliance with the emission and concentration limits of this permit and District Rules and Regulations.
    h. Measurements of particulate matter emissions shall be conducted in accordance with SDAPCD Method 5 or an alternative method approved by the District and EPA; and
    i. Unless otherwise authorized in writing by the District, testing for NOx, CO, VOC, PM10, and ammonia concentrations and emissions, as applicable, shall be conducted concurrently with the NOx and CO continuous emission monitoring system (CEMS) Relative Accuracy Test Audit (RATA).
    [Rules 20.3(d)(1) and 1200]

47. Relative Accuracy Test Audits (RATAs) and all other required certification tests shall be performed and completed on the NOx CEMS in accordance with applicable provisions of 40 CFR Part 75 Appendix A and B and 40 CFR §60.4405 and on the CO CEMS in accordance with applicable provisions of 40 CFR Part 60 Appendix B and F.
In order to provide for a reasonable assurance of compliance with the permitted emission limits, the CP CEMS must meet one of the following performance criteria:
a. A Relative Accuracy of 10% when the average reference method value is used in the denominator of Equation 2-6 of 40 CFR 60, Performance Specification 2;
b. A Relative Accuracy of 5.0% when the applicable emission standard is used n the denominator of Equation 2-6 of 40 FR, Performance Specification 2;
c. 0.50 ppmvd corrected to 15% oxygen and 1.0 lb/hr when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

[Rule 21, Rule 20.3 (d)(1), 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

48. A monitoring plan in conformance with 40 CFR 75.53 shall be submitted to U.S. EPA Region 9 and the District at least 45 days prior to the Relative Accuracy Test Audit test, as required in 40 CFR 75.62. (40 CFR Part 75)

50. The higher heating value of the combustion turbine fuel shall be measured by ASTM D1826–94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter or ASTM D1945–96, Standard Method for Analysis of Natural Gas by Gas Chromatography or an alternative test method approved by the District and EPA. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

51. The sulfur content of the combustion turbine fuel shall be sampled not less than once each calendar quarter in accordance with a protocol approved by the District and measured with ASTM D1072–90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases; ASTM D3246–05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry; ASTM D4468–85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry; ASTM D6228–98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection; or ASTM D6667–04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence or an alternative test method approved by the District and EPA. [Rule 20.3(d)(1), Rule 21, and 40 CFR Part 75]

52. The permit holder shall comply with the applicable continuous emission monitoring requirements of 40 CFR Part 75 and 40 CFR Part 60. [40 CFR Part 75 and 40 CFR Part 60]

53. A continuous emission monitoring system (CEMS) shall be installed on each combustion turbine and properly maintained and calibrated to measure, calculate, and record the following, in accordance with the District-approved CEMS protocol:
a. Clock-hourly average concentration of oxides of nitrogen (NOx) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen;
b. Clock-hourly average concentration of carbon monoxide (CO) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen;
c. Percent oxygen (O2) in the exhaust gas for each unit operating minute;
d. Clock-hourly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
e. Cumulative mass emissions of oxides of nitrogen (NOx) calculated as NO2 in each tuning operation, and startup and shutdown period, in pounds;
f. Calendar daily mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
g. Calendar monthly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
h. Rolling four-unit-operating-hour average concentration of oxides of nitrogen (NOx) in parts per million (ppmvd) corrected to 15% oxygen;
i. Rolling four-unit-operating-hour average emission rate of oxides of nitrogen (NOx), calculated as NO2, in pounds per megawatt-hour (lb/MWh);
j. Calendar quarter, calendar year, and rolling 12-calendar-month period mass emissions of oxides of nitrogen (NOx) calculated as NO2, in tons;
k. Cumulative mass emissions of carbon monoxide (CO) in each tuning operation, and startup and shutdown period, in pounds;
l. Clock-hourly mass emissions of carbon monoxide (CO), in pounds;
m. Calendar-daily mass emission of carbon monoxide (CO), in pounds;
n. Calendar-monthly mass emission of carbon monoxide (CO), in pounds;
o. Rolling 12-calendar-month period mass emission of carbon monoxide (CO), in tons;
p. Average concentration of oxides of nitrogen (NOx) and carbon monoxide (CO) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen during each unit operating minute; and
q. Average emission rate in pounds per hour of oxides of nitrogen (NOx) calculated as NO2 and carbon monoxide (CO) during each unit operating minute.
[Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

54. The oxides of nitrogen (NOx) and oxygen (O2) components of the CEMS shall be certified and maintained in accordance with applicable federal regulations including the requirements of §§ 75.10 and 75.12 of Title 40 Code of Federal Regulations Part 75 (40 CFR 75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMS Protocol approved by the District. The carbon monoxide (CO) component of the CEMS shall be certified and maintained in accordance with District Rule 19, 40 CFR 60, appendices B and F and the CEMS Protocol approved by the District. (District Rules 69.3.1, 20.3(d)(1); 40 CFR 60 Subpart KKKK; 40 CFR 60, appendices B and F; 40 CFR Part 75)

55. The CEMS shall be in operation in accordance with the District-approved CEMS Protocol at all times when the turbine is in operation. A copy of the District-approved CEMS Protocol shall be maintained on site and made available to District personnel upon request. (District Rules 69.3.1, and 20.3(d)(1); 40 CFR 60 Subpart KKKK; 40 CFR Part 75)

56. When the CEMS is not recording data and the combustion turbine is operating, hourly NOx emissions for purposes of calendar year and rolling 12-calendar-month period emission calculations shall be determined in accordance with 40 CFR 75 Subpart C. Additionally, hourly CO emissions for rolling 12-calendar-month period emission calculations shall be determined using CO emission factors to be determined from source test emission factors, recorded CEMS data, and fuel consumption data, in terms of pounds per hour of CO for the gas turbine. Emission calculations used to determine hourly emission rates shall be reviewed and approved by the District, in writing, before the hourly emission rates are incorporated into the CEMS emission data. [Rules 20.3(d)(3) and 21 and 40 CFR Part 75]

57. Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence. (CA Health and Safety Code, Division 26, Part 4, Chapter 5 § 42706)

58. The CEMS shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 Sections (D), (E), (F)(2), (F)(3), (F)(4) and (F)(5) and CEMS Protocol approved by the District. [Rule 19.2]

59. Except for changes that are specified in the initial approved CEMS protocol or a subsequent revision to that protocol that is approved in advance, in writing, by the District, the District shall be notified in writing at least thirty (30) calendar days prior to any planned changes made in the CEMS or Data Acquisition and Handling System (DAHS), including, but not limited to, the programmable logic controller, software which affects the value of data displayed on the CEMS / DAHS monitors with respect to the parameters measured by their respective sensing devices and any planned changes to the software that controls the ammonia flow to the SCR. Unplanned or emergency changes shall be reported within 96 hours. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

60. Copies of the approved CEMS protocol and the District's written approval shall be maintained on site and made available to District personnel upon request.

61. Fuel flowmeters shall be installed and maintained to measure the fuel flow rate, corrected for temperature and pressure, to each combustion turbine. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR Part 75, Appendix D, Section 2.1.6. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

62. Each combustion turbine shall be equipped with continuous monitors to measure, calculate, and record unit operating days, hours, and minutes and the following operational characteristics:

    a. Date and time;
    b. Natural gas flow rate to the combustion turbine during each unit operating minute, in standard cubic feet per minute;
    c. Total heat input to the combustion turbine based the fuels higher heating value during each unit operating minute, in million British thermal units per hour (MMBtu/hr);
    d. Higher heating value of the fuel on an hourly basis, in British thermal units per standard cubic foot (Btu/scf);
    e. Gross electrical power output during each unit operating minute in megawatts (MW); and
    f. Water injection rate in gallons per minute (gpm) or pounds per hour (lb/hr).

    The values of these operational characteristics shall be recorded at least once each unit operating minute. The monitors shall be installed, calibrated, maintained, and operated in accordance with a turbine operation monitoring protocol, which may be part of the CEMS Protocol and which shall include any relevant calculation methodologies, which is approved, in advance, in writing, by the District. The monitors shall be in full operation at all times when the combustion turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

63. Operating logs or Data Acquisition and Handling System (DAHS) records shall be maintained to record the beginning and end times and durations of all tuning periods, and startup and shutdown periods to the nearest minute, quantity of fuel used in each clock minute, clock hour, calendar month, and 12-calendar-month period in standard cubic feet; hours of operation each day; and hours of operation during each calendar year. For purposes of this condition, the hours of turbine operation is defined as the total minutes the turbine is combusting fuel during the calendar year divided by 60 rounded to the nearest hundredth of an hour. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

64. The permittee shall file semiannual reports in accordance with 40 CFR § 60.4375. (40 CFR 60 Subpart KKKK § 60.4375 (a))

65. Each semiannual report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each such semiannual compliance report shall be postmarked or delivered no later than January 30 or July 30, whichever date is the first date following the end of the semiannual reporting period. (40 CFR 60 Subpart KKKK; Rule 21)

66. All semiannual compliance reports shall be submitted to the District Compliance Division. (40 CFR § 60.7)

67. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.

B. DISTRICT-ONLY ENFORCEABLE CONDITIONS

20. When a combustion turbine is operating, the ammonia concentration (ammonia slip), shall not exceed 5.0 ppmvd corrected to 15 % oxygen and averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 1200]

49. The District may require one or more of the following compounds, or additional compounds, to be quantified through source testing periodically to ensure compliance with Rule 1200 and other conditions of this permit and to quantify toxic emissions:
a. Acetaldehyde
b. Acrolein
c. Benzene
d. Formaldehyde
e. Toluene
f. Xylenes
If the District requires the permittee to perform this source testing, the District shall request the testing in writing a reasonable period of time prior to the testing date. [Rule 1200, California H&S Code §41510]

68. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

69. The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

San Diego County Air Pollution Control District

COUNTY OF SAN DIEGO, AIR POLLUTION CONTROL DISTRICT
10124 OLD GROVE ROAD, SAN DIEGO, CA 92131
PHONE (858) 586-2600 Fax (858) 586-2601
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Sectors: 5, S
Site ID: APCD2010-SITE-00471
App ID: APCD2017-APP-005036

PERMIT ID
APCD2024-PTO-004835

Pio Pico Energy Center, LLC
Plant Manager Jason King
7363 Calzada de la Fuente
San Diego CA, 92154

EQUIPMENT ADDRESS
Pio Pico Energy Center, LLC
Plant Manager Jason King
7363 Calzada de la Fuente
San Diego CA 92154

PERMIT TO OPERATE

This permit is not valid until required fees are received by the District.

The above is hereby granted a Permit To Operate the article, machine, equipment or contrivance described below. This permit is not transferable to a new owner nor is it valid for operation of the equipment at another location except as specified. This Permit To Operate or copy must be posted on or within 25 feet of the equipment, or readily available on the operating premises.

EQUIPMENT OWNER

Pio Pico Energy Center, LLC 7363 Calzada de la Fuente, San Diego, CA 92154

EQUIPMENT DESCRIPTION

Turbine No. 2: A natural-gas-fired, simple-cycle, intercooled GE LMS100 PA combustion turbine generator rated at 1000 MMBtu/hr (HHV) heat input and 106.4 MW, Serial Number 878166, equipped with an evaporative cooler for the inlet air; a compressor intercooler utilizing a heat exchanger and a shared partial dry cooling system with a wet surface air cooler; a continuous emission monitoring system (CEMS) for NOx, O2, and CO; a data acquisition and handling system (DAHS) to record key operational parameters; water injection; a selective catalytic reduction system (SCR); an ammonia vaporization system, and an oxidation catalyst.

Every person who owns or operates this equipment is required to comply with the conditions listed below and all applicable requirements and District rules, including but not limited to Rules 10, 20, 40, 50, 51.

Fee Schedules: 1 [93A] Test Witness and Report Review (T&M)
1 [20F] Non- Aircraft Turbine Engine

BEC: APCD2024-CON-002082

FAILURE TO OPERATE IN COMPLIANCE IS A MISDEMEANOR SUBJECT TO CIVIL AND CRIMINAL PENALTIES

A. FEDERALLY-ENFORCEABLE AND DISTRICT-ENFORCEABLE CONDITIONS

1. This equipment shall be properly maintained and kept in good operating condition at all times, and, to the extent practicable, the owner or operator shall maintain and operate the equipment and any associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. [Rule 21 and/or 40 CFR §60.11]
2. A rolling 12-calendar-month period is one of a series of successive consecutive 12-calendar-month periods. The initial 12-month-calendar period of such a series shall begin on the first day of the month in which the applicable beginning date for that series occurs as specified in this permit. [Rule 20.3(d)(1), Rule 20.3(d)(3), Rule 21].
3. The permittee shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances. [40 CFR Part 73]

4. All records required by this permit shall be maintained on site for a minimum of five years and made available to the District upon request. [Rule 1421]
5. Unless otherwise defined for purposes of a specific condition, for purposes of determining compliance with the emission limits of this permit, a shutdown period is the 11-minute period preceding the moment at which fuel flow ceases. [Rule 20.3(d)(1)]
6. A startup period is the period of time that begins when fuel flows to the combustion turbine following a non-operational period. Unless otherwise defined for purposes of a specific condition, for purposes of determining compliance with the emission limits of this permit, the duration of a startup period shall not exceed 30 consecutive minutes. [Rule 20.3(d)(1)]
7. A non-operational period is any five-consecutive-minute period when fuel does not flow to the combustion turbine. [Rule 20.3(d)(1)]
8. A Continuous Emission Monitoring System (CEMS) protocol is a document approved in writing by the District that describes the methodology and quality assurance and quality control procedures for monitoring, calculating, and recording stack emissions from the combustion turbine that is monitored by the CEMS. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]
9. For each combustion turbine, a unit operating day, hour, and minute mean the following:
   a. A unit operating day means any calendar day in which the turbine combusts fuel.
   b. A unit operating hour means any clock hour in which the turbine combusts fuel.
   c. A unit operating minute means any clock minute in which the turbine combusts fuel.
   [Rule 21, 40 CFR Part 75, Rule 20.3(d)(1), 40 CFR Part 60 Subpart KKKK]
10. Tuning is defined as adjustments to the combustion or emission control system that involves operating the combustion turbine or emission control system in a manner such that the emissions control equipment may not be fully effective or operational. Only one gas turbine shall be tuned at any given time. Tuning events shall not exceed 720 unit operating minutes in a calendar day nor exceed 40 hours in a calendar year for each turbine. The District compliance division shall be notified at least 24 hours in advance of any tuning event. For purposes of this condition, the number of hours of tuning in a calendar year is defined as the total unit operating minutes of tuning during the calendar year divided by 60. [Rule 20.3(d)(1)]
11. The exhaust stacks for each combustion turbine shall be at least 100 feet in height above site base elevation and with an interior exhaust stack diameter of no more than 14.5 feet at the point of release unless it is demonstrated to the District that all requirements of District Rules 20.3 and 1200 are satisfied with a different stack configuration. [Rules 20.3(d)(2) and 1200]
12. The combustion turbines shall be fired on Public Utility Commission (PUC) quality natural gas. The permittee shall maintain, on site, quarterly records of the natural gas sulfur content expressed in units of grains of sulfur per 100 dscf of natural gas and hourly records of the higher heating values of the natural gas expressed in units of Btu/scf. These records shall be provided to District personnel upon request. Natural gas sulfur content records must be kept with a minimum reporting limit of 0.25 grains sulfur compounds per 100 dscf of natural gas. [Rule 20.3(d)(1)]
13. Unless otherwise specified in this permit, all continuous monitoring data shall be collected at least once every clock-minute. [Rules 69.3.1, and 20.3(d)(1)]
14. For purposes of determining compliance with emission limits based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on a Continuous Emission Monitoring System (CEMS), data collected in accordance with the CEMS protocol shall be used and the averages for averaging periods specified herein shall be calculated as specified in the CEMS protocol. [Rules 69.3.1, 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]
15. For purposes of determining compliance with emission limits based on CEMS data, all CEMS calculations, averages, and aggregates shall be performed in accordance with the CEMS protocol approved in writing by the District. [Rules 69.3.1, 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]

16. For each emission limit expressed as pounds, pounds per hour, or parts per million based on a one-hour or less averaging period or compliance period, compliance shall be based on using data collected at least once every minute when compliance is based on CEMS data except as specified in the District-approved CEMS Protocol. [Rules 69.3.1, and 20.3(d)(1)]
17. When a combustion turbine is combusting fuel (operating), the emission concentration of oxides of nitrogen (NOx), calculated as nitrogen dioxide (NO2), shall not exceed 2.5 ppmvd corrected to 15% oxygen averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 20.3(d)(1)]
18. When a combustion turbine is operating, the emission concentration of carbon monoxide (CO) shall not exceed 4.0 ppmvd corrected to 15 % oxygen, averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 20.3(d)(1)]
19. When a combustion turbine is operating, the volatile organic compound (VOC) concentration, calculated as methane, measured in the exhaust stack, shall not exceed 2.0 ppmvd corrected to 15% oxygen, averaged over a 1-clock-hour period, except during tuning operations, startup periods, and any clock minutes that are not excluded from shutdown periods for that turbine. For purposes of determining compliance based on source testing, an average of three subtests shall be used. [Rule 20.3(d)(1)]
21. When a combustion turbine is operating with post-combustion air pollution control equipment that controls oxides of nitrogen (NOx) emissions, the emission concentration NOx, calculated as nitrogen dioxide (NO2), shall not exceed 13.9 ppmvd averaged over each one-clock-hour period and corrected to 15% oxygen, except for startup and shutdown periods for that turbine, as defined in Rule 69.3.1. [Rule 69.3.1]
22. When a combustion turbine is operating without any post-combustion air pollution control equipment that controls oxides of nitrogen (NOx) emissions, the emission concentration of NOx calculated as nitrogen dioxide (NO2) from each turbine shall not exceed 23.2 ppmvd averaged over each one-clock-hour period and corrected to 15% oxygen, except for startup and shutdown periods for that turbine, as defined in Rule 69.3.1. [Rule 69.3.1]
23. For each rolling four-unit-operating-hour period, average emission concentration of oxides of nitrogen (NOx) for each turbine calculated as nitrogen dioxide (NO2) in parts per million by volume dry (ppmvd) corrected to 15% oxygen or, alternatively, as elected by the permittee, the average NOx emission rate in pounds per megawatt-hour (lb/MWh) shall not exceed an average emission limit calculated in accordance with 40 CFR Section 60.4380(b)(3). The emission concentration and emission rate averages shall be calculated in accordance with 40 CFR Section 60.4380(b)(1). The average emission concentration limit and emission rate limit shall be based on an average of hourly emission limits over the four-unit-operating-hour period including the operating-hour and three-unit-operating-hours immediately preceding. For any unit-operating-hour where multiple emission standards would apply based on load of the turbine, the applicable standard shall be the higher of the two limits. The hourly emission concentration limit and emission rate limit shall be as follows based on the load of the turbine over the four-unit-operating-hour period:

Case	Emission Limit, ppmvd at 15% O2	Emission Limit, lb/MWh
i. All four hours at or above 75% Load	15	0.43
ii. All four hours below 75% Load	96	4.7
iii. Combination of hrs	(a x 15+b x 96)/4	(a x 0.43+b x 4.7)/4

Where: a = the number of unit operating hours in the four-hour period with all operation above 75% load and b = 4-a.

The averages shall include emissions during all times that the equipment is operating including, but not limited to, emissions during startup and shutdown periods. For each six-calendar-month period, emissions in excess of these limits and monitor downtime shall be identified in accordance with 40 CFR Sections 60.4350 and 60.4380(b)(2), except that Section 60.4350(c) shall not apply for identifying periods in excess of a NOx concentration limit. For the purposes of this condition, unit-operating-hour shall have the meaning as defined in 40 CFR 60.4420. [40 CFR Part 60 Subpart KKKK]

24. The emissions of particulate matter less than or equal to 10 microns in diameter (PM10) from the exhaust stack of each combustion turbine shall not exceed 5.0 pounds per hour for each combustion turbine. Compliance with this limit shall be demonstrated based upon source testing and calculated as the average of three subtests. [Rule 20.3(d)(1) and (d)(2)]

25. The emissions of particulate matter less than or equal to 10 microns in diameter (PM10) from the exhaust stacks of the combustion turbines shall not exceed 3.5 pounds per hour per turbine, calculated as the arithmetic average of the source test results from the six most recent sets of valid source tests performed on the three turbines. For the purpose of this condition, a valid source test is a source test for which the results have been approved by the District, and that included at least three subtests in the calculation of average emission rate. [Rule 20.3(d)(1) and (d)(2)]

26. The discharge of particulate matter from the exhaust stack of each combustion turbine shall not exceed 0.10 grains per dry standard cubic foot (0.23 grams/dscm) corrected to 12% carbon dioxide by volume. The District may require periodic testing to verify compliance with this standard. [Rule 53]

27. Visible emissions from the lube oil vents and the exhaust stack of each combustion turbine shall not exceed 20% opacity for more than three (3) minutes in any period of 60 consecutive minutes. [Rule 50]

28. Mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits, except during tuning, startup, and shutdown periods for that turbine. A one-clock-hour averaging period for these limits shall be used when compliance is determined using CEMS data.

	Pollutant	Emission Limit, lb/hour
a.	NOx	8.2
b.	CO	8.0
c.	VOC	2.3

[Rule 20.3(d)(2)]

29. Cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's tuning operations.

	Pollutant	Emission Limit, lbs/hr
a.	NOx	45.6
b.	CO	75.0

[Rule 20.3(d)(1)]

30. Excluding any minutes that are coincident with a shutdown period, cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's startup periods.

	Pollutant	Emission Limit, lb/event
a.	NOx	22.5
b.	CO	17.9
c.	VOC	4.7

[Rule 20.3(d)(1)]

31. Cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's shutdown periods.

Pollutant	Emission Limit, lb/event
a. NOx	6.0
b. CO	47.0
c. VOC	3.0

[Rule 20.3(d)(1)]

32. The total aggregate oxides of nitrogen (NOx) emissions from all combustion turbines combined shall not exceed 150 pounds per hour, calculated as nitrogen dioxide and measured over each one-clock-hour period. This emission limit shall apply during all times one or more turbines are operating, including, but not limited to, emissions during tuning, startup, and shutdown periods. [Rule 20.3(d)(2)]

33. The carbon monoxide (CO) emissions from each combustion turbine shall not exceed 75 pounds per hour and total aggregate CO emissions from all combustion turbines combined shall not exceed 225 pounds per hour measured over each one-clock-hour period. This emission limit shall apply during all times that one or more turbines are operating, including, but not limited to emissions during tuning, startup, and shutdown periods. [Rule 20.3(d)(2)(i)]

34. Aggregate emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide (NO2); carbon monoxide (CO); volatile organic compounds (VOCs), calculated as methane; particulate matter less than or equal to 10 microns in diameter (PM10); and oxides of sulfur (SOx), calculated as sulfur dioxide (SO2), from the combustion turbines authorized to be constructed under this permit, except emissions from emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1), as it exists on the date the permit to operate for this equipment is approved, shall not exceed the following limits for each rolling 12- calendar-month period:

Pollutant	Emission Limit, tons per year
a. NOx	70.4
b. CO	96.4
c. VOC	19.4
d. PM10	35.8
e. SOx	4.1

The aggregate emissions of each pollutant shall include emissions during all times that the equipment is operating including, but not limited to, emissions during tuning, startup, and shutdown periods. All calculations performed to show compliance with these limits shall be performed according to a protocol approved in advance in writing by the District. [Rules 20.3(d)(2), 20.3(d)(3), 20.3(d)(5), 20.3(d)(8) and 21]

35. The wet surface air cooler (WSAC) shall be equipped with a mist eliminator designed to achieve a drift rate of 0.001% or less. In addition, the maximum total dissolved solids (TDS) concentration of the air-side recirculating cooling water used in the WSAC shall not exceed 5,600 ppm. The TDS concentration shall be verified through calendar quarterly testing of the water by a certified lab using an EPA approved method. In addition, emissions of PM10 from the WSAC shall not exceed 1.46 tons for each rolling 12-calendar-month period. For each calendar month, PM10 emissions from the WSAC shall be calculated using a District approved protocol that is based on either the design maximum air-side recirculating cooling water flow to the WSAC or the measured total air-side recirculating water flow to the WSAC during the calendar month; the design maximum drift rate; the TDS concentration from the calendar quarterly measurement for the calendar quarter that contains the month; and the actual hours of operation of the WSAC fans during the calendar month. Except for the TDS concentration, for which the owner or operator shall maintain records not less frequently than a calendar quarterly basis, the owner or operator shall maintain records not less frequently than a calendar monthly basis of each variable parameter necessary to calculate the WSAC PM10 emissions with the District approved protocol methodology including, but not limited to, the recirculating air-side cooling water flow rate and actual hours of operation of the WSAC fans, if applicable. [Rule 20.3(d)(1)]

36. For each calendar month and each rolling 12-calendar-month period, the owner or operator shall maintain records, as applicable, on a calendar monthly basis, of mass emissions during each calendar month and rolling 12-calendar month period of NOx, calculated as NO2; CO; VOCs, calculated as methane; PM10; and SOx, calculated as SO2, in tons, from each emission unit located at this stationary source, except for emissions from emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1) as it exists on the date the permit to operate for this equipment is approved. These records shall be made available for inspection within 15 calendar days after the end of each calendar month. The recorded emissions shall be calculated in accordance with an emission calculation protocol approved by the District. Where applicable, this protocol may rely in whole or in part on the CEMS Protocol or other monitoring protocols required by this permit. [Rules 20.3(d)(3), 20.3(d)(8) and 21]

37. The associated ammonia vaporizer system shall be operated and maintained in accordance with the manufacturer's instructions and shall begin operating as soon as feasible before a turbine startup period begins and be fully operational at all times when a combustion turbine is operating. [Rules 20.3(d)(1) and 21]

38. When a combustion turbine is operating, ammonia shall be injected at all times provided that all of the following are satisfied:
a. The associated selective catalytic reduction (SCR) system catalyst inlet temperature is 570 degrees Fahrenheit (°F) or greater;
b. The associated ammonia vaporizer system air heater exit temperature has attained 300 °F or greater after the beginning of the startup period and is greater than 250 °F during continuous operations;
c. The associated ammonia vaporizer system ammonia-air mixing header exit temperature has attained 275 °F or greater after the beginning of the startup period and is greater than 215 °F during continuous operations.
For purposes of this condition, the SCR inlet temperature shall be determined as the smallest of the temperatures measured by the SCR inlet temperature monitors including only those monitors that are fully operational and measuring temperature within their specified accuracy. [Rules 20.3(d)(1) and 21]

39. Continuous monitors shall be installed on each SCR system and associated ammonia vaporizer system to monitor or calculate, as applicable, and record each unit operating minute the ammonia solution injection rate in pounds per hour, the SCR inlet temperature at three points at the inlet to the SCR in degrees Fahrenheit (°F), the ammonia vaporizer system air heater exit temperature in °F, and ammonia-air mixing header exit temperature in °F. The monitors shall be calibrated, maintained, and operated in accordance with a District approved protocol, which may be part of the CEMS Protocol. If the District has not approved any protocol the monitors shall be calibrated, maintained, and operated in accordance with the manufacturer's instructions until the date that a District approved protocol is in effect. The monitors shall be in full operation at all times when the turbine is in operation. [Rules 20.3(d)(1)]

40. Except during periods when the ammonia injection system is being tuned or one or more ammonia injection systems is in manual control for compliance with applicable permit conditions, the automatic ammonia injection system serving each SCR system shall be in operation in accordance with manufacturer's specifications at all times when ammonia is being injected into the SCR system. Manufacturer specifications shall be maintained on site and made available to District personnel upon request. [Rules 20.3(d)(1), 21]

41. The concentration of ammonia solution used in the ammonia injection system shall be less than 20% ammonia by weight. Records of ammonia solution concentration shall be maintained on site and made available to district personnel upon request

42. All source test or other tests required by this permit shall be performed by the District or performed by an independent contractor and witnessed and approved by the District. Unless otherwise specified in this permit or authorized in writing by the District, a proposed test protocol shall be submitted to the District for written approval at least 45 calendar days prior to source testing for all testing performed by an independent contractor. Additionally, the District shall be notified a minimum of 30 calendar days prior to the test so that observers may be present unless otherwise authorized in writing by the District. [Rules 20.2(d)(1) and 1200 and 40 CFR Part 60 Subpart GG and 40 CFR §60.8]

43. The owner or operator of this equipment shall submit a source test protocol to measure concentrations and mass emissions of Volatile Organic Compounds (VOCs), including formaldehyde, during startup and shutdown conditions at least 45 days prior to conducting this test. Measurement of VOC emissions shall be conducted in accordance with EPA Method 18, or alternative methods approved by the District and EPA. Measurement of emissions of formaldehyde shall be conducted in accordance with EPA Method 316 or 323, or an alternative method approved by the District and EPA. This test shall be conducted on the same dates as the first RATA and source test performed for each turbine conducted during each five-year Title V Permit term. [Rule 20.3]

44. Unless otherwise specified in this permit or authorized in writing by the District, within 45 days after completion of a source test or Relative Accuracy Test Audit (RATA) performed by an independent contractor, a final test report shall be submitted to the District for review and approval. [Rules 20.3(d)(1) and 1200 and 40 CFR Part 60 Subpart KKKK, 40 CFR §60.8, and 40 CFR Part 75]

45. A renewal source test and a NOx and CO Relative Accuracy Test Audit (RATA) shall be periodically conducted on each combustion turbine to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit and applicable relative accuracy requirements for the CEMS systems using District-approved methods. The renewal source test and the NOx and CO RATAs shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR 75, Appendix B, Sections 2.3.1 and 2.3.3. The renewal source test shall be conducted in accordance with a protocol complying with all the applicable requirements of the source test protocol for the Initial Emissions Source Test. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

46. Each combustion turbine shall be source tested to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit. The source test protocol shall comply with all of the following requirements:

    a. Measurements of NOx and CO concentrations and emissions and oxygen (O2) concentration shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) methods 7E, 10, and 3A, respectively, and District source test Method 100, or alternative methods approved by the District and EPA;
    b. Measurement of VOC concentrations and emissions, except for formaldehyde, shall be conducted in accordance with EPA Method 18, or an alternative method approved by the District and EPA;
    c. Measurement of formaldehyde concentrations and emissions shall be conducted in accordance with EPA Method 316 or 323, as specified by the District, or an alternative method approved by the District and EPA;
    d. Total VOC concentrations and emissions shall be the sum of those concentrations and emissions determined using Method 18 and the formaldehyde concentrations and emissions;
    e. Measurements of ammonia concentrations shall be conducted in accordance with Bay Area Air Quality Management District Method ST-1B or an alternative method approved by the District and EPA;
    f. Measurements of PM10 emissions shall be conducted in accordance with EPA Methods 201A and 202, or EPA Methods 5 and 202 (reporting PM as PM10), or an alternative method approved by the District and EPA;
    g. Source testing shall be performed at the normal load level, as specified in 40 CFR Part 75 Appendix A Section 6.5.2.1 (d), provided it is not less than 80% of the combustion turbine's rated load unless it is demonstrated to the satisfaction of the District that the combustion turbine cannot operate under these conditions. If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous power level. The District may specify additional testing at different load levels or operational conditions to ensure compliance with the emission and concentration limits of this permit and District Rules and Regulations.
    h. Measurements of particulate matter emissions shall be conducted in accordance with SDAPCD Method 5 or an alternative method approved by the District and EPA; and
    i. Unless otherwise authorized in writing by the District, testing for NOx, CO, VOC, PM10, and ammonia concentrations and emissions, as applicable, shall be conducted concurrently with the NOx and CO continuous emission monitoring system (CEMS) Relative Accuracy Test Audit (RATA).
    [Rules 20.3(d)(1) and 1200]

47. Relative Accuracy Test Audits (RATAs) and all other required certification tests shall be performed and completed on the NOx CEMS in accordance with applicable provisions of 40 CFR Part 75 Appendix A and B and 40 CFR §60.4405 and on the CO CEMS in accordance with applicable provisions of 40 CFR Part 60 Appendix B and F.
In order to provide for a reasonable assurance of compliance with the permitted emission limits, the CP CEMS must meet one of the following performance criteria:
a. A Relative Accuracy of 10% when the average reference method value is used in the denominator of Equation 2-6 of 40 CFR 60, Performance Specification 2;
b. A Relative Accuracy of 5.0% when the applicable emission standard is used n the denominator of Equation 2-6 of 40 FR, Performance Specification 2;
c. 0.50 ppmvd corrected to 15% oxygen and 1.0 lb/hr when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

[Rule 21, Rule 20.3 (d)(1), 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

48. A monitoring plan in conformance with 40 CFR 75.53 shall be submitted to U.S. EPA Region 9 and the District at least 45 days prior to the Relative Accuracy Test Audit test, as required in 40 CFR 75.62. (40 CFR Part 75)

50. The higher heating value of the combustion turbine fuel shall be measured by ASTM D1826–94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter or ASTM D1945–96, Standard Method for Analysis of Natural Gas by Gas Chromatography or an alternative test method approved by the District and EPA. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

51. The sulfur content of the combustion turbine fuel shall be sampled not less than once each calendar quarter in accordance with a protocol approved by the District and measured with ASTM D1072–90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases; ASTM D3246–05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry; ASTM D4468–85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry; ASTM D6228–98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection; or ASTM D6667–04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence or an alternative test method approved by the District and EPA. [Rule 20.3(d)(1), Rule 21, and 40 CFR Part 75]

52. The permit holder shall comply with the applicable continuous emission monitoring requirements of 40 CFR Part 75 and 40 CFR Part 60. [40 CFR Part 75 and 40 CFR Part 60]

53. A continuous emission monitoring system (CEMS) shall be installed on each combustion turbine and properly maintained and calibrated to measure, calculate, and record the following, in accordance with the District-approved CEMS protocol:
a. Clock-hourly average concentration of oxides of nitrogen (NOx) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen;
b. Clock-hourly average concentration of carbon monoxide (CO) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen;
c. Percent oxygen (O2) in the exhaust gas for each unit operating minute;
d. Clock-hourly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
e. Cumulative mass emissions of oxides of nitrogen (NOx) calculated as NO2 in each tuning operation, and startup and shutdown period, in pounds;
f. Calendar daily mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
g. Calendar monthly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
h. Rolling four-unit-operating-hour average concentration of oxides of nitrogen (NOx) in parts per million (ppmvd) corrected to 15% oxygen;
i. Rolling four-unit-operating-hour average emission rate of oxides of nitrogen (NOx), calculated as NO2, in pounds per megawatt-hour (lb/MWh);
j. Calendar quarter, calendar year, and rolling 12-calendar-month period mass emissions of oxides of nitrogen (NOx) calculated as NO2, in tons;
k. Cumulative mass emissions of carbon monoxide (CO) in each tuning operation, and startup and shutdown period, in pounds;
l. Clock-hourly mass emissions of carbon monoxide (CO), in pounds;
m. Calendar-daily mass emission of carbon monoxide (CO), in pounds;
n. Calendar-monthly mass emission of carbon monoxide (CO), in pounds;
o. Rolling 12-calendar-month period mass emission of carbon monoxide (CO), in tons;
p. Average concentration of oxides of nitrogen (NOx) and carbon monoxide (CO) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen during each unit operating minute; and
q. Average emission rate in pounds per hour of oxides of nitrogen (NOx) calculated as NO2 and carbon monoxide (CO) during each unit operating minute.
[Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

54. The oxides of nitrogen (NOx) and oxygen (O2) components of the CEMS shall be certified and maintained in accordance with applicable federal regulations including the requirements of §§ 75.10 and 75.12 of Title 40 Code of Federal Regulations Part 75 (40 CFR 75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMS Protocol approved by the District. The carbon monoxide (CO) component of the CEMS shall be certified and maintained in accordance with District Rule 19, 40 CFR 60, appendices B and F and the CEMS Protocol approved by the District. (District Rules 69.3.1, 20.3(d)(1); 40 CFR 60 Subpart KKKK; 40 CFR 60, appendices B and F; 40 CFR Part 75)

55. The CEMS shall be in operation in accordance with the District-approved CEMS Protocol at all times when the turbine is in operation. A copy of the District-approved CEMS Protocol shall be maintained on site and made available to District personnel upon request. (District Rules 69.3.1, and 20.3(d)(1); 40 CFR 60 Subpart KKKK; 40 CFR Part 75)

56. When the CEMS is not recording data and the combustion turbine is operating, hourly NOx emissions for purposes of calendar year and rolling 12-calendar-month period emission calculations shall be determined in accordance with 40 CFR 75 Subpart C. Additionally, hourly CO emissions for rolling 12-calendar-month period emission calculations shall be determined using CO emission factors to be determined from source test emission factors, recorded CEMS data, and fuel consumption data, in terms of pounds per hour of CO for the gas turbine. Emission calculations used to determine hourly emission rates shall be reviewed and approved by the District, in writing, before the hourly emission rates are incorporated into the CEMS emission data. [Rules 20.3(d)(3) and 21 and 40 CFR Part 75]

57. Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence. (CA Health and Safety Code, Division 26, Part 4, Chapter 5 § 42706)

58. The CEMS shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 Sections (D), (E), (F)(2), (F)(3), (F)(4) and (F)(5) and CEMS Protocol approved by the District. [Rule 19.2]

59. Except for changes that are specified in the initial approved CEMS protocol or a subsequent revision to that protocol that is approved in advance, in writing, by the District, the District shall be notified in writing at least thirty (30) calendar days prior to any planned changes made in the CEMS or Data Acquisition and Handling System (DAHS), including, but not limited to, the programmable logic controller, software which affects the value of data displayed on the CEMS / DAHS monitors with respect to the parameters measured by their respective sensing devices and any planned changes to the software that controls the ammonia flow to the SCR. Unplanned or emergency changes shall be reported within 96 hours. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

60. Copies of the approved CEMS protocol and the District's written approval shall be maintained on site and made available to District personnel upon request.

61. Fuel flowmeters shall be installed and maintained to measure the fuel flow rate, corrected for temperature and pressure, to each combustion turbine. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR Part 75, Appendix D, Section 2.1.6. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

62. Each combustion turbine shall be equipped with continuous monitors to measure, calculate, and record unit operating days, hours, and minutes and the following operational characteristics:

    a. Date and time;
    b. Natural gas flow rate to the combustion turbine during each unit operating minute, in standard cubic feet per minute;
    c. Total heat input to the combustion turbine based the fuels higher heating value during each unit operating minute, in million British thermal units per hour (MMBtu/hr);
    d. Higher heating value of the fuel on an hourly basis, in British thermal units per standard cubic foot (Btu/scf);
    e. Gross electrical power output during each unit operating minute in megawatts (MW); and
    f. Water injection rate in gallons per minute (gpm) or pounds per hour (lb/hr).

    The values of these operational characteristics shall be recorded at least once each unit operating minute. The monitors shall be installed, calibrated, maintained, and operated in accordance with a turbine operation monitoring protocol, which may be part of the CEMS Protocol and which shall include any relevant calculation methodologies, which is approved, in advance, in writing, by the District. The monitors shall be in full operation at all times when the combustion turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

63. Operating logs or Data Acquisition and Handling System (DAHS) records shall be maintained to record the beginning and end times and durations of all tuning periods, and startup and shutdown periods to the nearest minute, quantity of fuel used in each clock minute, clock hour, calendar month, and 12-calendar-month period in standard cubic feet; hours of operation each day; and hours of operation during each calendar year. For purposes of this condition, the hours of turbine operation is defined as the total minutes the turbine is combusting fuel during the calendar year divided by 60 rounded to the nearest hundredth of an hour. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

64. The permittee shall file semiannual reports in accordance with 40 CFR § 60.4375. (40 CFR 60 Subpart KKKK § 60.4375 (a))

65. Each semiannual report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each such semiannual compliance report shall be postmarked or delivered no later than January 30 or July 30, whichever date is the first date following the end of the semiannual reporting period. (40 CFR 60 Subpart KKKK; Rule 21)

66. All semiannual compliance reports shall be submitted to the District Compliance Division. (40 CFR § 60.7)

67. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.

B. DISTRICT-ONLY ENFORCEABLE CONDITIONS

20. When a combustion turbine is operating, the ammonia concentration (ammonia slip), shall not exceed 5.0 ppmvd corrected to 15 % oxygen and averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 1200]

49. The District may require one or more of the following compounds, or additional compounds, to be quantified through source testing periodically to ensure compliance with Rule 1200 and other conditions of this permit and to quantify toxic emissions:
a. Acetaldehyde
b. Acrolein
c. Benzene
d. Formaldehyde
e. Toluene
f. Xylenes
If the District requires the permittee to perform this source testing, the District shall request the testing in writing a reasonable period of time prior to the testing date. [Rule 1200, California H&S Code §41510]

68. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

69. The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

San Diego County Air Pollution Control District

COUNTY OF SAN DIEGO, AIR POLLUTION CONTROL DISTRICT
10124 OLD GROVE ROAD, SAN DIEGO, CA 92131
PHONE (858) 586-2600 Fax (858) 586-2601
www.sdapcd.org

Sectors: 5, S
Site ID: APCD2010-SITE-00471
App ID: APCD2017-APP-005036

PERMIT ID
APCD2024-PTO-004836

Pio Pico Energy Center, LLC
Plant Manager Jason King
7363 Calzada de la Fuente
San Diego CA, 92154

EQUIPMENT ADDRESS
Pio Pico Energy Center, LLC
Plant Manager Jason King
7363 Calzada de la Fuente
San Diego CA 92154

PERMIT TO OPERATE

This permit is not valid until required fees are received by the District.

The above is hereby granted a Permit To Operate the article, machine, equipment or contrivance described below. This permit is not transferable to a new owner nor is it valid for operation of the equipment at another location except as specified. This Permit To Operate or copy must be posted on or within 25 feet of the equipment, or readily available on the operating premises.

EQUIPMENT OWNER

Pio Pico Energy Center, LLC 7363 Calzada de la Fuente, San Diego, CA 92154

EQUIPMENT DESCRIPTION

Turbine No. 3: A natural-gas-fired, simple-cycle, intercooled GE LMS100 PA combustion turbine generator rated at 1000 MMBtu/hr (HHV) heat input and 106.4 MW, Serial Number 878167, equipped with an evaporative cooler for the inlet air; a compressor intercooler utilizing a heat exchanger and a shared partial dry cooling system with a wet surface air cooler; a continuous emission monitoring system (CEMS) for NOx, O2, and CO; a data acquisition and handling system (DAHS) to record key operational parameters; water injection; a selective catalytic reduction system (SCR); an ammonia vaporization system, and an oxidation catalyst.

Every person who owns or operates this equipment is required to comply with the conditions listed below and all applicable requirements and District rules, including but not limited to Rules 10, 20, 40, 50, 51.

Fee Schedules: 1 [93A] Test Witness and Report Review (T&M)
1 [20F] Non- Aircraft Turbine Engine

BEC: APCD2024-CON-002082

FAILURE TO OPERATE IN COMPLIANCE IS A MISDEMEANOR SUBJECT TO CIVIL AND CRIMINAL PENALTIES

A. FEDERALLY-ENFORCEABLE AND DISTRICT-ENFORCEABLE CONDITIONS

1. This equipment shall be properly maintained and kept in good operating condition at all times, and, to the extent practicable, the owner or operator shall maintain and operate the equipment and any associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. [Rule 21 and/or 40 CFR §60.11]
2. A rolling 12-calendar-month period is one of a series of successive consecutive 12-calendar-month periods. The initial 12-month-calendar period of such a series shall begin on the first day of the month in which the applicable beginning date for that series occurs as specified in this permit. [Rule 20.3(d)(1), Rule 20.3(d)(3), Rule 21].
3. The permittee shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances. [40 CFR Part 73]

4. All records required by this permit shall be maintained on site for a minimum of five years and made available to the District upon request. [Rule 1421]
5. Unless otherwise defined for purposes of a specific condition, for purposes of determining compliance with the emission limits of this permit, a shutdown period is the 11-minute period preceding the moment at which fuel flow ceases. [Rule 20.3(d)(1)]
6. A startup period is the period of time that begins when fuel flows to the combustion turbine following a non-operational period. Unless otherwise defined for purposes of a specific condition, for purposes of determining compliance with the emission limits of this permit, the duration of a startup period shall not exceed 30 consecutive minutes. [Rule 20.3(d)(1)]
7. A non-operational period is any five-consecutive-minute period when fuel does not flow to the combustion turbine. [Rule 20.3(d)(1)]
8. A Continuous Emission Monitoring System (CEMS) protocol is a document approved in writing by the District that describes the methodology and quality assurance and quality control procedures for monitoring, calculating, and recording stack emissions from the combustion turbine that is monitored by the CEMS. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]
9. For each combustion turbine, a unit operating day, hour, and minute mean the following:
   a. A unit operating day means any calendar day in which the turbine combusts fuel.
   b. A unit operating hour means any clock hour in which the turbine combusts fuel.
   c. A unit operating minute means any clock minute in which the turbine combusts fuel.
   [Rule 21, 40 CFR Part 75, Rule 20.3(d)(1), 40 CFR Part 60 Subpart KKKK]
10. Tuning is defined as adjustments to the combustion or emission control system that involves operating the combustion turbine or emission control system in a manner such that the emissions control equipment may not be fully effective or operational. Only one gas turbine shall be tuned at any given time. Tuning events shall not exceed 720 unit operating minutes in a calendar day nor exceed 40 hours in a calendar year for each turbine. The District compliance division shall be notified at least 24 hours in advance of any tuning event. For purposes of this condition, the number of hours of tuning in a calendar year is defined as the total unit operating minutes of tuning during the calendar year divided by 60. [Rule 20.3(d)(1)]
11. The exhaust stacks for each combustion turbine shall be at least 100 feet in height above site base elevation and with an interior exhaust stack diameter of no more than 14.5 feet at the point of release unless it is demonstrated to the District that all requirements of District Rules 20.3 and 1200 are satisfied with a different stack configuration. [Rules 20.3(d)(2) and 1200]
12. The combustion turbines shall be fired on Public Utility Commission (PUC) quality natural gas. The permittee shall maintain, on site, quarterly records of the natural gas sulfur content expressed in units of grains of sulfur per 100 dscf of natural gas and hourly records of the higher heating values of the natural gas expressed in units of Btu/scf. These records shall be provided to District personnel upon request. Natural gas sulfur content records must be kept with a minimum reporting limit of 0.25 grains sulfur compounds per 100 dscf of natural gas. [Rule 20.3(d)(1)]
13. Unless otherwise specified in this permit, all continuous monitoring data shall be collected at least once every clock-minute. [Rules 69.3.1, and 20.3(d)(1)]
14. For purposes of determining compliance with emission limits based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on a Continuous Emission Monitoring System (CEMS), data collected in accordance with the CEMS protocol shall be used and the averages for averaging periods specified herein shall be calculated as specified in the CEMS protocol. [Rules 69.3.1, 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]
15. For purposes of determining compliance with emission limits based on CEMS data, all CEMS calculations, averages, and aggregates shall be performed in accordance with the CEMS protocol approved in writing by the District. [Rules 69.3.1, 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, 40 CFR Part 60 Appendix B and F, and 40 CFR Part 75]

16. For each emission limit expressed as pounds, pounds per hour, or parts per million based on a one-hour or less averaging period or compliance period, compliance shall be based on using data collected at least once every minute when compliance is based on CEMS data except as specified in the District-approved CEMS Protocol. [Rules 69.3.1, and 20.3(d)(1)]
17. When a combustion turbine is combusting fuel (operating), the emission concentration of oxides of nitrogen (NOx), calculated as nitrogen dioxide (NO2), shall not exceed 2.5 ppmvd corrected to 15% oxygen averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 20.3(d)(1)]
18. When a combustion turbine is operating, the emission concentration of carbon monoxide (CO) shall not exceed 4.0 ppmvd corrected to 15 % oxygen, averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 20.3(d)(1)]
19. When a combustion turbine is operating, the volatile organic compound (VOC) concentration, calculated as methane, measured in the exhaust stack, shall not exceed 2.0 ppmvd corrected to 15% oxygen, averaged over a 1-clock-hour period, except during tuning operations, startup periods, and any clock minutes that are not excluded from shutdown periods for that turbine. For purposes of determining compliance based on source testing, an average of three subtests shall be used. [Rule 20.3(d)(1)]
21. When a combustion turbine is operating with post-combustion air pollution control equipment that controls oxides of nitrogen (NOx) emissions, the emission concentration NOx, calculated as nitrogen dioxide (NO2), shall not exceed 13.9 ppmvd averaged over each one-clock-hour period and corrected to 15% oxygen, except for startup and shutdown periods for that turbine, as defined in Rule 69.3.1. [Rule 69.3.1]
22. When a combustion turbine is operating without any post-combustion air pollution control equipment that controls oxides of nitrogen (NOx) emissions, the emission concentration of NOx calculated as nitrogen dioxide (NO2) from each turbine shall not exceed 23.2 ppmvd averaged over each one-clock-hour period and corrected to 15% oxygen, except for startup and shutdown periods for that turbine, as defined in Rule 69.3.1. [Rule 69.3.1]
23. For each rolling four-unit-operating-hour period, average emission concentration of oxides of nitrogen (NOx) for each turbine calculated as nitrogen dioxide (NO2) in parts per million by volume dry (ppmvd) corrected to 15% oxygen or, alternatively, as elected by the permittee, the average NOx emission rate in pounds per megawatt-hour (lb/MWh) shall not exceed an average emission limit calculated in accordance with 40 CFR Section 60.4380(b)(3). The emission concentration and emission rate averages shall be calculated in accordance with 40 CFR Section 60.4380(b)(1). The average emission concentration limit and emission rate limit shall be based on an average of hourly emission limits over the four-unit-operating-hour period including the operating-hour and three-unit-operating-hours immediately preceding. For any unit-operating-hour where multiple emission standards would apply based on load of the turbine, the applicable standard shall be the higher of the two limits. The hourly emission concentration limit and emission rate limit shall be as follows based on the load of the turbine over the four-unit-operating-hour period:

Case	Emission Limit, ppmvd at 15% O2	Emission Limit, lb/MWh
i. All four hours at or above 75% Load	15	0.43
ii. All four hours below 75% Load	96	4.7
iii. Combination of hrs	(a x 15+b x 96)/4	(a x 0.43+b x 4.7)/4

Where: a = the number of unit operating hours in the four-hour period with all operation above 75% load and b = 4-a.

The averages shall include emissions during all times that the equipment is operating including, but not limited to, emissions during startup and shutdown periods. For each six-calendar-month period, emissions in excess of these limits and monitor downtime shall be identified in accordance with 40 CFR Sections 60.4350 and 60.4380(b)(2), except that Section 60.4350(c) shall not apply for identifying periods in excess of a NOx concentration limit. For the purposes of this condition, unit-operating-hour shall have the meaning as defined in 40 CFR 60.4420. [40 CFR Part 60 Subpart KKKK]

24. The emissions of particulate matter less than or equal to 10 microns in diameter (PM10) from the exhaust stack of each combustion turbine shall not exceed 5.0 pounds per hour for each combustion turbine. Compliance with this limit shall be demonstrated based upon source testing and calculated as the average of three subtests. [Rule 20.3(d)(1) and (d)(2)]

25. The emissions of particulate matter less than or equal to 10 microns in diameter (PM10) from the exhaust stacks of the combustion turbines shall not exceed 3.5 pounds per hour per turbine, calculated as the arithmetic average of the source test results from the six most recent sets of valid source tests performed on the three turbines. For the purpose of this condition, a valid source test is a source test for which the results have been approved by the District, and that included at least three subtests in the calculation of average emission rate. [Rule 20.3(d)(1) and (d)(2)]

26. The discharge of particulate matter from the exhaust stack of each combustion turbine shall not exceed 0.10 grains per dry standard cubic foot (0.23 grams/dscm) corrected to 12% carbon dioxide by volume. The District may require periodic testing to verify compliance with this standard. [Rule 53]

27. Visible emissions from the lube oil vents and the exhaust stack of each combustion turbine shall not exceed 20% opacity for more than three (3) minutes in any period of 60 consecutive minutes. [Rule 50]

28. Mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits, except during tuning, startup, and shutdown periods for that turbine. A one-clock-hour averaging period for these limits shall be used when compliance is determined using CEMS data.

	Pollutant	Emission Limit, lb/hour
a.	NOx	8.2
b.	CO	8.0
c.	VOC	2.3

[Rule 20.3(d)(2)]

29. Cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's tuning operations.

	Pollutant	Emission Limit, lbs/hr
a.	NOx	45.6
b.	CO	75.0

[Rule 20.3(d)(1)]

30. Excluding any minutes that are coincident with a shutdown period, cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's startup periods.

	Pollutant	Emission Limit, lb/event
a.	NOx	22.5
b.	CO	17.9
c.	VOC	4.7

[Rule 20.3(d)(1)]

31. Cumulative mass emissions from each combustion turbine of oxides of nitrogen (NOx), calculated as NO2; carbon monoxide (CO); and volatile organic compounds (VOC), calculated as methane, shall not exceed the following limits during each of that turbine's shutdown periods.

Pollutant	Emission Limit, lb/event
a. NOx	6.0
b. CO	47.0
c. VOC	3.0

[Rule 20.3(d)(1)]

32. The total aggregate oxides of nitrogen (NOx) emissions from all combustion turbines combined shall not exceed 150 pounds per hour, calculated as nitrogen dioxide and measured over each one-clock-hour period. This emission limit shall apply during all times one or more turbines are operating, including, but not limited to, emissions during tuning, startup, and shutdown periods. [Rule 20.3(d)(2)]

33. The carbon monoxide (CO) emissions from each combustion turbine shall not exceed 75 pounds per hour and total aggregate CO emissions from all combustion turbines combined shall not exceed 225 pounds per hour measured over each one-clock-hour period. This emission limit shall apply during all times that one or more turbines are operating, including, but not limited to emissions during tuning, startup, and shutdown periods. [Rule 20.3(d)(2)(i)]

34. Aggregate emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide (NO2); carbon monoxide (CO); volatile organic compounds (VOCs), calculated as methane; particulate matter less than or equal to 10 microns in diameter (PM10); and oxides of sulfur (SOx), calculated as sulfur dioxide (SO2), from the combustion turbines authorized to be constructed under this permit, except emissions from emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1), as it exists on the date the permit to operate for this equipment is approved, shall not exceed the following limits for each rolling 12- calendar-month period:

Pollutant	Emission Limit, tons per year
a. NOx	70.4
b. CO	96.4
c. VOC	19.4
d. PM10	35.8
e. SOx	4.1

The aggregate emissions of each pollutant shall include emissions during all times that the equipment is operating including, but not limited to, emissions during tuning, startup, and shutdown periods. All calculations performed to show compliance with these limits shall be performed according to a protocol approved in advance in writing by the District. [Rules 20.3(d)(2), 20.3(d)(3), 20.3(d)(5), 20.3(d)(8) and 21]

35. The wet surface air cooler (WSAC) shall be equipped with a mist eliminator designed to achieve a drift rate of 0.001% or less. In addition, the maximum total dissolved solids (TDS) concentration of the air-side recirculating cooling water used in the WSAC shall not exceed 5,600 ppm. The TDS concentration shall be verified through calendar quarterly testing of the water by a certified lab using an EPA approved method. In addition, emissions of PM10 from the WSAC shall not exceed 1.46 tons for each rolling 12-calendar-month period. For each calendar month, PM10 emissions from the WSAC shall be calculated using a District approved protocol that is based on either the design maximum air-side recirculating cooling water flow to the WSAC or the measured total air-side recirculating water flow to the WSAC during the calendar month; the design maximum drift rate; the TDS concentration from the calendar quarterly measurement for the calendar quarter that contains the month; and the actual hours of operation of the WSAC fans during the calendar month. Except for the TDS concentration, for which the owner or operator shall maintain records not less frequently than a calendar quarterly basis, the owner or operator shall maintain records not less frequently than a calendar monthly basis of each variable parameter necessary to calculate the WSAC PM10 emissions with the District approved protocol methodology including, but not limited to, the recirculating air-side cooling water flow rate and actual hours of operation of the WSAC fans, if applicable. [Rule 20.3(d)(1)]

36. For each calendar month and each rolling 12-calendar-month period, the owner or operator shall maintain records, as applicable, on a calendar monthly basis, of mass emissions during each calendar month and rolling 12-calendar month period of NOx, calculated as NO2; CO; VOCs, calculated as methane; PM10; and SOx, calculated as SO2, in tons, from each emission unit located at this stationary source, except for emissions from emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1) as it exists on the date the permit to operate for this equipment is approved. These records shall be made available for inspection within 15 calendar days after the end of each calendar month. The recorded emissions shall be calculated in accordance with an emission calculation protocol approved by the District. Where applicable, this protocol may rely in whole or in part on the CEMS Protocol or other monitoring protocols required by this permit. [Rules 20.3(d)(3), 20.3(d)(8) and 21]

37. The associated ammonia vaporizer system shall be operated and maintained in accordance with the manufacturer's instructions and shall begin operating as soon as feasible before a turbine startup period begins and be fully operational at all times when a combustion turbine is operating. [Rules 20.3(d)(1) and 21]

38. When a combustion turbine is operating, ammonia shall be injected at all times provided that all of the following are satisfied:
a. The associated selective catalytic reduction (SCR) system catalyst inlet temperature is 570 degrees Fahrenheit (°F) or greater;
b. The associated ammonia vaporizer system air heater exit temperature has attained 300 °F or greater after the beginning of the startup period and is greater than 250 °F during continuous operations;
c. The associated ammonia vaporizer system ammonia-air mixing header exit temperature has attained 275 °F or greater after the beginning of the startup period and is greater than 215 °F during continuous operations.
For purposes of this condition, the SCR inlet temperature shall be determined as the smallest of the temperatures measured by the SCR inlet temperature monitors including only those monitors that are fully operational and measuring temperature within their specified accuracy. [Rules 20.3(d)(1) and 21]

39. Continuous monitors shall be installed on each SCR system and associated ammonia vaporizer system to monitor or calculate, as applicable, and record each unit operating minute the ammonia solution injection rate in pounds per hour, the SCR inlet temperature at three points at the inlet to the SCR in degrees Fahrenheit (°F), the ammonia vaporizer system air heater exit temperature in °F, and ammonia-air mixing header exit temperature in °F. The monitors shall be calibrated, maintained, and operated in accordance with a District approved protocol, which may be part of the CEMS Protocol. If the District has not approved any protocol the monitors shall be calibrated, maintained, and operated in accordance with the manufacturer's instructions until the date that a District approved protocol is in effect. The monitors shall be in full operation at all times when the turbine is in operation. [Rules 20.3(d)(1)]

40. Except during periods when the ammonia injection system is being tuned or one or more ammonia injection systems is in manual control for compliance with applicable permit conditions, the automatic ammonia injection system serving each SCR system shall be in operation in accordance with manufacturer's specifications at all times when ammonia is being injected into the SCR system. Manufacturer specifications shall be maintained on site and made available to District personnel upon request. [Rules 20.3(d)(1), 21]

41. The concentration of ammonia solution used in the ammonia injection system shall be less than 20% ammonia by weight. Records of ammonia solution concentration shall be maintained on site and made available to district personnel upon request

42. All source test or other tests required by this permit shall be performed by the District or performed by an independent contractor and witnessed and approved by the District. Unless otherwise specified in this permit or authorized in writing by the District, a proposed test protocol shall be submitted to the District for written approval at least 45 calendar days prior to source testing for all testing performed by an independent contractor. Additionally, the District shall be notified a minimum of 30 calendar days prior to the test so that observers may be present unless otherwise authorized in writing by the District. [Rules 20.2(d)(1) and 1200 and 40 CFR Part 60 Subpart GG and 40 CFR §60.8]

43. The owner or operator of this equipment shall submit a source test protocol to measure concentrations and mass emissions of Volatile Organic Compounds (VOCs), including formaldehyde, during startup and shutdown conditions at least 45 days prior to conducting this test. Measurement of VOC emissions shall be conducted in accordance with EPA Method 18, or alternative methods approved by the District and EPA. Measurement of emissions of formaldehyde shall be conducted in accordance with EPA Method 316 or 323, or an alternative method approved by the District and EPA. This test shall be conducted on the same dates as the first RATA and source test performed for each turbine conducted during each five-year Title V Permit term. [Rule 20.3]

44. Unless otherwise specified in this permit or authorized in writing by the District, within 45 days after completion of a source test or Relative Accuracy Test Audit (RATA) performed by an independent contractor, a final test report shall be submitted to the District for review and approval. [Rules 20.3(d)(1) and 1200 and 40 CFR Part 60 Subpart KKKK, 40 CFR §60.8, and 40 CFR Part 75]

45. A renewal source test and a NOx and CO Relative Accuracy Test Audit (RATA) shall be periodically conducted on each combustion turbine to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit and applicable relative accuracy requirements for the CEMS systems using District-approved methods. The renewal source test and the NOx and CO RATAs shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR 75, Appendix B, Sections 2.3.1 and 2.3.3. The renewal source test shall be conducted in accordance with a protocol complying with all the applicable requirements of the source test protocol for the Initial Emissions Source Test. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

46. Each combustion turbine shall be source tested to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit. The source test protocol shall comply with all of the following requirements:

    a. Measurements of NOx and CO concentrations and emissions and oxygen (O2) concentration shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) methods 7E, 10, and 3A, respectively, and District source test Method 100, or alternative methods approved by the District and EPA;
    b. Measurement of VOC concentrations and emissions, except for formaldehyde, shall be conducted in accordance with EPA Method 18, or an alternative method approved by the District and EPA;
    c. Measurement of formaldehyde concentrations and emissions shall be conducted in accordance with EPA Method 316 or 323, as specified by the District, or an alternative method approved by the District and EPA;
    d. Total VOC concentrations and emissions shall be the sum of those concentrations and emissions determined using Method 18 and the formaldehyde concentrations and emissions;
    e. Measurements of ammonia concentrations shall be conducted in accordance with Bay Area Air Quality Management District Method ST-1B or an alternative method approved by the District and EPA;
    f. Measurements of PM10 emissions shall be conducted in accordance with EPA Methods 201A and 202, or EPA Methods 5 and 202 (reporting PM as PM10), or an alternative method approved by the District and EPA;
    g. Source testing shall be performed at the normal load level, as specified in 40 CFR Part 75 Appendix A Section 6.5.2.1 (d), provided it is not less than 80% of the combustion turbine's rated load unless it is demonstrated to the satisfaction of the District that the combustion turbine cannot operate under these conditions. If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous power level. The District may specify additional testing at different load levels or operational conditions to ensure compliance with the emission and concentration limits of this permit and District Rules and Regulations.
    h. Measurements of particulate matter emissions shall be conducted in accordance with SDAPCD Method 5 or an alternative method approved by the District and EPA; and
    i. Unless otherwise authorized in writing by the District, testing for NOx, CO, VOC, PM10, and ammonia concentrations and emissions, as applicable, shall be conducted concurrently with the NOx and CO continuous emission monitoring system (CEMS) Relative Accuracy Test Audit (RATA).
    [Rules 20.3(d)(1) and 1200]

47. Relative Accuracy Test Audits (RATAs) and all other required certification tests shall be performed and completed on the NOx CEMS in accordance with applicable provisions of 40 CFR Part 75 Appendix A and B and 40 CFR §60.4405 and on the CO CEMS in accordance with applicable provisions of 40 CFR Part 60 Appendix B and F.
In order to provide for a reasonable assurance of compliance with the permitted emission limits, the CP CEMS must meet one of the following performance criteria:
a. A Relative Accuracy of 10% when the average reference method value is used in the denominator of Equation 2-6 of 40 CFR 60, Performance Specification 2;
b. A Relative Accuracy of 5.0% when the applicable emission standard is used n the denominator of Equation 2-6 of 40 FR, Performance Specification 2;
c. 0.50 ppmvd corrected to 15% oxygen and 1.0 lb/hr when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

[Rule 21, Rule 20.3 (d)(1), 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

48. A monitoring plan in conformance with 40 CFR 75.53 shall be submitted to U.S. EPA Region 9 and the District at least 45 days prior to the Relative Accuracy Test Audit test, as required in 40 CFR 75.62. (40 CFR Part 75)

50. The higher heating value of the combustion turbine fuel shall be measured by ASTM D1826–94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter or ASTM D1945–96, Standard Method for Analysis of Natural Gas by Gas Chromatography or an alternative test method approved by the District and EPA. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

51. The sulfur content of the combustion turbine fuel shall be sampled not less than once each calendar quarter in accordance with a protocol approved by the District and measured with ASTM D1072–90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases; ASTM D3246–05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry; ASTM D4468–85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry; ASTM D6228–98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection; or ASTM D6667–04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence or an alternative test method approved by the District and EPA. [Rule 20.3(d)(1), Rule 21, and 40 CFR Part 75]

52. The permit holder shall comply with the applicable continuous emission monitoring requirements of 40 CFR Part 75 and 40 CFR Part 60. [40 CFR Part 75 and 40 CFR Part 60]

53. A continuous emission monitoring system (CEMS) shall be installed on each combustion turbine and properly maintained and calibrated to measure, calculate, and record the following, in accordance with the District-approved CEMS protocol:
a. Clock-hourly average concentration of oxides of nitrogen (NOx) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen;
b. Clock-hourly average concentration of carbon monoxide (CO) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen;
c. Percent oxygen (O2) in the exhaust gas for each unit operating minute;
d. Clock-hourly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
e. Cumulative mass emissions of oxides of nitrogen (NOx) calculated as NO2 in each tuning operation, and startup and shutdown period, in pounds;
f. Calendar daily mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
g. Calendar monthly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;
h. Rolling four-unit-operating-hour average concentration of oxides of nitrogen (NOx) in parts per million (ppmvd) corrected to 15% oxygen;
i. Rolling four-unit-operating-hour average emission rate of oxides of nitrogen (NOx), calculated as NO2, in pounds per megawatt-hour (lb/MWh);
j. Calendar quarter, calendar year, and rolling 12-calendar-month period mass emissions of oxides of nitrogen (NOx) calculated as NO2, in tons;
k. Cumulative mass emissions of carbon monoxide (CO) in each tuning operation, and startup and shutdown period, in pounds;
l. Clock-hourly mass emissions of carbon monoxide (CO), in pounds;
m. Calendar-daily mass emission of carbon monoxide (CO), in pounds;
n. Calendar-monthly mass emission of carbon monoxide (CO), in pounds;
o. Rolling 12-calendar-month period mass emission of carbon monoxide (CO), in tons;
p. Average concentration of oxides of nitrogen (NOx) and carbon monoxide (CO) in parts per million (ppmvd) both uncorrected and corrected to 15% oxygen during each unit operating minute; and
q. Average emission rate in pounds per hour of oxides of nitrogen (NOx) calculated as NO2 and carbon monoxide (CO) during each unit operating minute.
[Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

54. The oxides of nitrogen (NOx) and oxygen (O2) components of the CEMS shall be certified and maintained in accordance with applicable federal regulations including the requirements of §§ 75.10 and 75.12 of Title 40 Code of Federal Regulations Part 75 (40 CFR 75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMS Protocol approved by the District. The carbon monoxide (CO) component of the CEMS shall be certified and maintained in accordance with District Rule 19, 40 CFR 60, appendices B and F and the CEMS Protocol approved by the District. (District Rules 69.3.1, 20.3(d)(1); 40 CFR 60 Subpart KKKK; 40 CFR 60, appendices B and F; 40 CFR Part 75)

55. The CEMS shall be in operation in accordance with the District-approved CEMS Protocol at all times when the turbine is in operation. A copy of the District-approved CEMS Protocol shall be maintained on site and made available to District personnel upon request. (District Rules 69.3.1, and 20.3(d)(1); 40 CFR 60 Subpart KKKK; 40 CFR Part 75)

56. When the CEMS is not recording data and the combustion turbine is operating, hourly NOx emissions for purposes of calendar year and rolling 12-calendar-month period emission calculations shall be determined in accordance with 40 CFR 75 Subpart C. Additionally, hourly CO emissions for rolling 12-calendar-month period emission calculations shall be determined using CO emission factors to be determined from source test emission factors, recorded CEMS data, and fuel consumption data, in terms of pounds per hour of CO for the gas turbine. Emission calculations used to determine hourly emission rates shall be reviewed and approved by the District, in writing, before the hourly emission rates are incorporated into the CEMS emission data. [Rules 20.3(d)(3) and 21 and 40 CFR Part 75]

57. Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence. (CA Health and Safety Code, Division 26, Part 4, Chapter 5 § 42706)

58. The CEMS shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 Sections (D), (E), (F)(2), (F)(3), (F)(4) and (F)(5) and CEMS Protocol approved by the District. [Rule 19.2]

59. Except for changes that are specified in the initial approved CEMS protocol or a subsequent revision to that protocol that is approved in advance, in writing, by the District, the District shall be notified in writing at least thirty (30) calendar days prior to any planned changes made in the CEMS or Data Acquisition and Handling System (DAHS), including, but not limited to, the programmable logic controller, software which affects the value of data displayed on the CEMS / DAHS monitors with respect to the parameters measured by their respective sensing devices and any planned changes to the software that controls the ammonia flow to the SCR. Unplanned or emergency changes shall be reported within 96 hours. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

60. Copies of the approved CEMS protocol and the District's written approval shall be maintained on site and made available to District personnel upon request.

61. Fuel flowmeters shall be installed and maintained to measure the fuel flow rate, corrected for temperature and pressure, to each combustion turbine. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR Part 75, Appendix D, Section 2.1.6. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

62. Each combustion turbine shall be equipped with continuous monitors to measure, calculate, and record unit operating days, hours, and minutes and the following operational characteristics:

    a. Date and time;
    b. Natural gas flow rate to the combustion turbine during each unit operating minute, in standard cubic feet per minute;
    c. Total heat input to the combustion turbine based the fuels higher heating value during each unit operating minute, in million British thermal units per hour (MMBtu/hr);
    d. Higher heating value of the fuel on an hourly basis, in British thermal units per standard cubic foot (Btu/scf);
    e. Gross electrical power output during each unit operating minute in megawatts (MW); and
    f. Water injection rate in gallons per minute (gpm) or pounds per hour (lb/hr).

    The values of these operational characteristics shall be recorded at least once each unit operating minute. The monitors shall be installed, calibrated, maintained, and operated in accordance with a turbine operation monitoring protocol, which may be part of the CEMS Protocol and which shall include any relevant calculation methodologies, which is approved, in advance, in writing, by the District. The monitors shall be in full operation at all times when the combustion turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

63. Operating logs or Data Acquisition and Handling System (DAHS) records shall be maintained to record the beginning and end times and durations of all tuning periods, and startup and shutdown periods to the nearest minute, quantity of fuel used in each clock minute, clock hour, calendar month, and 12-calendar-month period in standard cubic feet; hours of operation each day; and hours of operation during each calendar year. For purposes of this condition, the hours of turbine operation is defined as the total minutes the turbine is combusting fuel during the calendar year divided by 60 rounded to the nearest hundredth of an hour. [Rules 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

64. The permittee shall file semiannual reports in accordance with 40 CFR § 60.4375. (40 CFR 60 Subpart KKKK § 60.4375 (a))

65. Each semiannual report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each such semiannual compliance report shall be postmarked or delivered no later than January 30 or July 30, whichever date is the first date following the end of the semiannual reporting period. (40 CFR 60 Subpart KKKK; Rule 21)

66. All semiannual compliance reports shall be submitted to the District Compliance Division. (40 CFR § 60.7)

67. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.

B. DISTRICT-ONLY ENFORCEABLE CONDITIONS

20. When a combustion turbine is operating, the ammonia concentration (ammonia slip), shall not exceed 5.0 ppmvd corrected to 15 % oxygen and averaged over a one-clock-hour period, except during tuning, startup, and shutdown periods for that turbine. [Rule 1200]

49. The District may require one or more of the following compounds, or additional compounds, to be quantified through source testing periodically to ensure compliance with Rule 1200 and other conditions of this permit and to quantify toxic emissions:
a. Acetaldehyde
b. Acrolein
c. Benzene
d. Formaldehyde
e. Toluene
f. Xylenes
If the District requires the permittee to perform this source testing, the District shall request the testing in writing a reasonable period of time prior to the testing date. [Rule 1200, California H&S Code §41510]

68. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

69. The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

APPENDIX B: RULE REFERENCE TABLE

Rule Citation[1]	RULE TITLE	A/R[2]	District Adoption Date[3]	SIP FR Approval Date
	REGULATION I - GENERAL PROVISIONS			
1	Title	F	04/30/80	09/28/81
2	Definitions	F	7/11/17	11/12/20
4	Review of Rules	F	01/01/70†	09/22/72
5	Authority to Arrest	F	03/24/76†	NA
6	Minor Violations	D	12/15/99	N/A
	REGULATION II - PERMITS			
10	Permits Required	F	07/25/95	03/11/98
10.1††	NSPS & NESHAPS Requirements	D	11/8/76	N/A
11	Exemptions from Rule 10 Permit Requirements	F D	07/08/20 10/13/22	10/28/22 Pending
12	Registration of Specified Equipment	D	11/15/00	N/A
12.1	Portable Equipment Registration	D	05/21/97	N/A
14	Applications	F	04/30/80	09/28/81
15	Permit Process - Public Notifications	D	09/18/90	N/A
17	Cancellation of Applications	F	04/06/93	03/11/98
18	Action on Applications	D	09/18/90	N/A
19	Provision of Sampling and Testing Facilities	F	04/06/93	03/11/98
19.1††	NSPS & NESHAPS Provision of Sampling and Testing Facilities Requirements	D	11/08/76	N/A
19.2	Continuous Emission Monitoring Requirements	F D	01/12/79 10/12/23	09/28/81 Pending
19.3	Emission Information	F D	05/15/96 12/09/21	03/09/00 Pending
20	Standards for Granting Permits	F	04/25/89	10/04/18
20.1	NSR - General Provisions	F	10/14/21	09/28/22
20.2*	NSR - Non-major Stationary Sources	F	06/26/19	09/16/20
20.3*	NSR - Major Stationary Source and PSD Stationary Source	F	10/14/21	09/28/22
20.4*	NSR - Portable Emission Units	F	10/14/21	09/28/22
20.5	Power Plants	F	07/05/79	04/14/81
20.6	Standards for Permit to Operate - Air Quality Analysis	F	04/27/16	10/04/18
20.8	Special Offset Requirement Relating to Banking	D	2/16/83	N/A
21	Permit Conditions	F	11/29/94	03/11/98
22	Denial of Applications	D	01/01/69†	N/A
23	Further Information	D	01/01/69†	N/A
24	Temporary Permit to Operate	F	06/29/16	10/04/18
25	Appeals	F	01/01/69†	09/22/72
25	Appeals	D	06/21/00	N/A

26.0	Banking of Emission Reduction Credits (ERCs) - General Requirements	D	06/26/19	N/A
26.1	Standards for Granting Emission Reduction Credits (ERCs)	D	10/22/97	N/A
26.2	Use of Emission Reduction Credits (ERCs)	D	10/22/97	N/A
26.3	Reclassification of Class B Emission Reduction Credits (ERCs)	D	10/22/97	N/A
26.4	Permanency of Banked Emission Reduction Credits (ERCs)	D	10/22/97	N/A
26.5	Transfer of Emission Reduction Credits (ERCs)	D	10/22/97	N/A
26.6	District Banking of Emission Reduction Credits (ERCs)	D	10/22/97	N/A
26.7	Shutdown and Related Emission Unit	D	10/22/97	N/A
26.8	Banking of Limited Emission Reductions	D	10/22/97	N/A
26.9	Emission Reduction Credit Certificates and The Emission Reduction Credit Register	D	10/22/97	N/A
26.10	Banking For BRAC Military Base Closure or Realignment Actions	D	10/22/97	N/A
27	Banking of Mobile Source Emission Reduction Credits	D	11/29/94	N/A
27.1	Federal Requirements for San Diego County APCD Alternative Mobile Source Emission Reduction Program Approved On 9/8/2000	F	08/06/08	06/03/09
	REGULATIONS III - FEES			
40	Permit Fees	D	01/12/23	N/A
42	Hearing Board Fees	D	04/14/22	N/A
44	Technical Reports, Charges for	D	12/7/83	N/A
45	Federally Mandated Ozone Nonattainment Fees	D	6/9/2022	Pending
	REGULATIONS IV - PROHIBITIONS			
50	Visible Emissions	F	08/13/97	12/7/98
50.1††	NSPS & NESHAPS Visible Emissions Requirements	D	11/08/76	N/A
51	Nuisance	F	01/01/69†	09/22/72
52	Particulate Matter	F	01/22/97	12/9/98
52.1††	NSPS & NESHAPS Particular Matter Requirements	D	11/08/76	N/A
53	Specific Contaminants	F	01/22/97	12/9/98
53.1	Scavenger Plants	F	01/01/69†	09/22/72
53.2††	NSPS & NESHAPS Specific Contaminants Requirements	D	11/08/76	N/A
54	Dusts and Fumes	F	01/22/97	12/9/98
54.1	NSPS & NESHAP Dust and Fumes Requirement	D	11/08/76	N/A
55	Fugitive Dust Control	D	06/24/09	N/A
58	Incinerator Burning	F	01/17/73†	05/11/77
59	Control of Waste Disposal - Site Emissions	D	11/03/87	N/A
59.1	Municipal Solid Waste Landfills	D	06/17/98	N/A
60	Circumvention	F	05/17/94	03/09/00
60.1	Limiting Potential to Emit – Small Sources	D	04/04/12	N/A
60.2	Limiting Potential to Emit - Synthetic Minor Sources	D	04/04/12	N/A
61.0	Definitions Pertaining to the Storage & Handling of Organic Compounds	F	10/16/90	09/13/93
61.1	Receiving & Storing Volatile Organic Compounds at Bulk Plants & Bulk Terminals	F	01/10/95	08/08/95

61.2	Transfer of Volatile Organic Compounds into Mobile Transport Tanks	F	02/10/21	12/16/22
61.3	Transfer of Volatile Organic Compounds into Stationary Storage Tanks	F	10/16/90	06/30/93
61.3.1	Transfer of Gasoline into Stationary Underground Storage Tanks	D	03/01/06	09/03/21
61.4	Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks	F	10/16/90	05/13/93
61.4	Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks	F	03/26/08	01/7/13
61.4.1	Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicles Fuel Tanks	D	03/01/06	N/A
61.5	Visible Emission Standards for Vapor Control Systems	F	09/20/78†	04/14/81
61.6	NSPS Requirements for Storage of Volatile Organic Compounds	D	01/13/87	Withdrawn
61.7	Spillage and Leakage of Volatile Organic Compounds	F	01/13/87	03/11/98
61.8	Certification Requirements for Vapor Control Equipment	F	01/13/87	03/11/98
62	Sulfur Content of Fuels	F	10/21/81	07/06/82
62.1††	NSPS Requirements for Sulfur Content of Fuels	D	11/08/76	N/A
64	Reduction of Animal Matter	F	08/21/81	07/06/82
66.1	Miscellaneous Surface Coating Operations and Other Processes Emitting VOCs	F D	2/24/10 5/11/16	08/09/12 ?
67.0.1	Architectural Coatings	F	02/10/21	12/14/22
67.1	Alternative Emission Control Plans	F	05/15/96	03/27/97
67.2	Dry Cleaning Equipment Using Petroleum - Based Solvent	F	05/15/96	03/27/97
67.3	Metal Parts and Products Coating Operations	F	04/09/03	11/14/03
67.4	Metal Container, Metal Closure and Metal Coil Coating Operations	F	11/09/11	09/20/12
67.5	Paper, Film and Fabric Coating Operations	F	05/15/96	03/27/97
67.6.1	Cold Solvent Cleaning and Stripping Operations	F	02/10/21	10/22/21
67.6.2	Vapor Degreasing Operations	F	02/10/21	10/22/21
67.7	Cutback and Emulsified Asphalts	F	05/15/96	03/27/97
67.9	Aerospace Coating Operations	F	04/30/97	08/17/98
67.10	Kelp Processing and Bio-Polymer Manufacturing	F	06/25/97	06/22/98
67.11	Wood Parts and Products Coating Operations	F	06/27/12	04/11/13
67.12.1	Polyester Resin Operations	F	05/11/16	04/02/18
67.15	Pharmaceutical and Cosmetic Manufacturing Operations	F	05/15/96	03/27/97
67.16	Graphic Arts Operations	F	05/09/12	09/20/12
67.17	Storage of Materials Containing Volatile Organic Compounds	F	05/15/96	03/27/97
67.18	Marine Coating Operations	F	05/15/96	03/27/97
67.19	Coating and Printing Inks Manufacturing Operations	F	05/15/96	05/26/00
67.20.1	Motor Vehicle and Mobile Equipment Coating Operations	D	06/30/10	N/A
67.21	Adhesive Material Application Operations	D	11/14/08	N/A
67.22	Expandable Polystyrene Foam Products Manufacturing Operations	D	05/15/96	N/A

67.24	Bakery Ovens	F	05/15/96	03/27/97
68	Fuel-Burning Equipment – Oxides of Nitrogen	F	09/20/94	04/09/96
68.1††	NSPS Requirements for Oxides of Nitrogen from Fuel-Burning Equipment	D	11/08/76	N/A
69	Electrical Generating Steam Boilers, Replacement Units & New Units	D	12/12/95	N/A
69.2	Industrial & Commercial Boilers, Process Heaters & Steam Generators	F	09/27/94	02/09/96
69.2.1	Small Boilers, Process Heaters and Steam Generators	D/F	07/08/20	Pending
69.2.2	Medium Boilers, Process Heaters and Steam Generators	F	09/09/21	8/23/23
69.3**	Stationary Gas Turbine Engines	F	Repealed	06/17/97 (Withdrawal Pending)
69.3.1**	Stationary Gas Turbine Engines – BARCT	D	12/9/21	Pending
69.4**	Stationary Internal Combustion Engines	F	Repealed	01/04/06 (Withdrawal Pending)
69.4.1**	Stationary Internal Combustion Engines - BARCT	D	07/08/20	Pending
69.5.1	Natural Gas-Fired Water Heaters	D	06/24/15	N/A
69.6	Natural Gas-Fired Fan-Type Central Furnaces	D	06/17/98	N/A
69.7	Landfill Gas Flares	D/F	03/09/23	Pending
70	Orchard Heaters	F	01/17/72	09/22/72
71	Abrasive Blasting	F	03/30/77	08/31/78
	REGULATION V - PROCEDURES BEFORE THE HEARING BOARD			
75	Procedure Before the Hearing Board	D	09/17/85	N/A
75.1††	NSPS & NESHAPS Variance Procedures	D	09/17/85	N/A
97	Emergency Variance	D	07/25/95	N/A
98	Breakdown Conditions: Emergency Variance	D	07/25/95	N/A
	REGULATION VI - BURNING CONTROL			
101	Burning Control	F	09/25/02	04/30/03
	REGULATION VII - VALIDITY AND EFFECTIVE DATE			
140	Validity	F	01/01/69†	09/22/72
141	Effective Date	F	01/01/69†	09/22/72
	REGULATION VIII - SAN DIEGO AIR POLLUTION EMERGENCY PLAN			
126	Applicability	F	05/25/77	08/31/78
127	Episode Criteria Levels	F	09/17/91	03/18/99
128	Episode Declaration	F	09/17/91	03/18/99
129	Episode Termination	F	05/25/77	08/31/78
130	Episode Actions	F	09/17/91	03/18/99
131	Stationary Source Curtailment Plan	F	04/01/81	06/21/82

132	Traffic Abatement Plan	F D	05/01/81 12/17/97	06/21/82 N/A
133	Schools	F	05/25/77	08/31/78
134	Source Inspection	F	04/01/81	06/21/82
135	Air Monitoring Stations	F	05/25/77	08/31/78
136	Interdistrict and Interbasin Coordination	F	05/25/77	08/31/78
137	Emergency Action Committee	F	05/25/77	08/31/78
138	Procedures and Plans	F	05/25/77	08/31/78
	APPENDIX A - Persons to be Notified on Episode Declaration	F		
	REGULATION IX - PUBLIC RECORDS			
175	General	F	05/22/74†	05/11/77
176	Information Supplied to District	F	05/22/74†	05/11/77
177	Inspection of Public Records	F D	03/30/77 06/20/01	08/31/78 N/A
	REGULATION XII - TOXIC AIR CONTAMINANTS			
1200	Toxic Air Contaminants - New Source Review	D	09/19/23	N/A
1202	Hexavalent Chromium - Cooling Towers	D	07/25/95	N/A
1203	Ethylene Oxide Sterilizers and Aerators	D	07/26/00	N/A
1205	Control of Dioxins Emissions from Medical Waste Incinerators	D	01/01/94	N/A
1206	Asbestos Removal, Renovation, and Demolition	D	11/15/17	N/A
1210	Toxic Air Contaminant Public Health Risks - Public Notification and Risk Reduction	D	09/19/23	N/A

	REGULATION XIV - **TITLE V OPERATING PERMITS**			
1401	General Provisions	F	10/14/21	02/27/04
1410	Permit Required	F	02/27/04	02/27/04
1411	Exemption from Permit to Operate for Insignificant Units	F	03/07/95	11/30/01
1412	Federal Acid Rain Program Requirements	F	01/18/94	11/30/01
1413	Early Reduction of Hazardous Air Pollutants	F	03/07/95	11/30/01
1414	Applications	F	03/07/95	11/30/01
1415	Permit Process-Public Notification	F D	02/27/04 10/12/23	02/27/04 Pending
1417	Pendency & Cancellation of Applications	F	03/07/95	11/30/01
1418	Action on Applications	F	02/27/04	11/30/01
1419	Provisions of Sampling & Testing Facilities & Emission Information	F	03/07/95	11/30/01
1420	Standards for Granting Permits	F	03/07/95	11/30/01
1421	Permit Conditions	F	02/27/04	02/27/04
1422	Denial or Cancellation Of Applications	F	03/07/95	11/30/01
1423	Further Information	F	01/18/94	11/30/01
1424	Applications Deemed Denied	F	01/18/94	11/30/01
1425	Appeals & Judicial Review	F	02/27/04	02/27/04
	APPENDIX A - Insignificant Units	F	02/27/04	11/30/01
	REGULATION XV - **FEDERAL CONFORMITY**			
1501	Conformity of General Federal Actions	F	06/22/99	04/23/99

The following NSPS and NESHAP have been adopted locally by the District. EPA has granted the District delegation for each of these rules. Therefore, these rules, as adopted by the District are the federally applicable requirements. In addition, if an NSPS or NESHAP is revised by EPA and the revised rule not adopted by the District, both versions of the rule are considered federally applicable requirements and the most stringent requirement applies until such time as the District adopts the revised version.

Subpart & Citation	RULE TITLE	District Adoption Date(s)	Federal Delegation Date
Part 60	**REGULATION X - STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES**	04/06/2021	As shown below
A	General Provisions	04/06/2021	04/08/2021
D	Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978	01/29/2020	04/08/2021
Da	Standards of Performance for Industrial-Commercial -Institutional Steam Generating Units	01/29/2020	04/08/2021
Db	Standards of Performance for Small Industrial-Commercial - Institutional Steam Generating Units	01/29/2020	04/08/2021
Dc	Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978	01/29/2020	04/08/2021
E	Standards of Performance for Incinerators	01/29/2020	04/08/2021
Eb	Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification Or Reconstruction Commenced After June 19, 1996	06/20/2007	01/03/2008
Ec	Standards of Performance for Hospital/Medical/Infectious Waste Incinerators	01/29/2020	04/08/2021
I	Standards of Performance for Hot Mix Asphalt Facilities	01/29/2020	04/08/2021
J	Standards of Performance for Petroleum Refineries	01/29/2020	04/08/2021
K	Standards of Performance for Storage Vessels for Petroleum Liquids Construct After June 11, 1973 and Prior to May 19, 1978	06/20/2007	01/03/2008
Ka	Standards of Performance for Storage Vessels for Petroleum Liquids Construction after May 18, 1978	06/20/2007	01/03/2008
Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	06/20/2007	01/03/2008
L	Standards of Performance for Secondary Lead Smelters	01/29/2020	04/08/2021
M	Standards of Performance for Secondary Brass and Bronze Ingot Production Plants	01/29/2020	04/08/2021
O	Standards of Performance for Sewage Treatment Plants	01/29/2020	04/08/2021
DD	Standards of Performance for Grain Elevators	01/29/2020	04/08/2021
EE	Standards of Performance for Surface Coating Metal Furniture	01/29/2020	04/08/2021
GG	Standards of Performance for Stationary Gas Turbines	01/29/2020	04/08/2021
QQ	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing	01/29/2020	04/08/2021
RR	Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations	01/29/2020	04/08/2021
SS	Standards of Performance for the Industrial Surface Coating Large Appliances	01/29/2020	04/08/2021
TT	Standards of Performance for Metal Coil Surface Coating	01/29/2020	04/08/2021
AAA	Standards of Performance for New Residential Wood Heaters	04/06/2021	04/08/2021
BBB	Standards of Performance for the Rubber Tire Manufacturing Industry	01/29/2020	04/08/2021

FFF	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing	01/29/2020	04/08/2021
JJJ	Standards of Performance for Petroleum Dry Cleaners	01/29/2020	04/08/2021
OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	01/29/2020	04/08/2021
UUU	Standards of Performance for Calciners and Dryers in Mineral Industries	01/29/2020	04/08/2021
VVV	Standards for Polymeric Coating of Supporting Substrates Facilities	05/23/2007	01/03/2008
WWW	Standards of Performance for Municipal Solid Waste Landfills	04/06/2021	04/08/2021
AAAA	Standards of Performance for Small Municipal Waste Combustion Units	06/20/2007	01/03/2008
CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	04/06/2021	04/08/2021
EEEE	Standards of Performance for Other Solid Waste Incineration Units	01/29/2020	04/08/2021
IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	04/06/2021	04/08/2021
JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	04/06/2021	04/08/2021
KKKK	Standards of Performance for Stationary Combustion Turbines	04/06/2021	04/08/2021
QQQQ	Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces	04/06/2021	04/08/2021
TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	04/06/2021	04/08/2021
Part 61	**REGULATION XI- NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS)**		
A	General Provisions	01/13/87	05/24/82
C	National Emission Standard for Beryllium	Unknown	11/08/76
D	National Emission Standard for Beryllium Rocket Motor Firing	Unknown	11/08/76
E	National Emission Standard for Mercury	03/27/90	05/17/91
F	National Emission Standard for Vinyl Chloride	08/17/77 06/16/78	11/21/77

The following ATCM and NESHAP have not been adopted by the District, but are being implemented and enforced by the District as ATCM's.

Subpart & Citation	Rule Title
	District Rules and Regulations Appendix A - California Airborne Toxic Control Measures (ATCM)
17 CCR § 93102	Hexavalent Chromium ATCM for Chrome Plating & Chromic Acid Anodizing Operations
17 CCR § 93109	ATCM For Emissions of Perchloroethylene From Dry Cleaning Operations
17 CCR § 93101.5	ATCM to Reduce Emissions of Hexavalent Chromium and Nickel from Thermal Spraying
17 CCR § 93105	ATCM for Construction, Grading, Quarrying, and Surface Mining Operations
17 CCR § 93106	Asbestos ATCM for Surface Applications
17 CCR § 93107	ATCM For Emissions of Toxic Metals From Non-Ferrous Metal Melting
17 CCR § 93111	ATCM for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance & Repair Activities
17 CCR § 93112	ATCM for Emissions of Hexavalent Chromium and Cadmium from Motor Vehicle and Motor Equipment Coatings
17 CCR § 93113	ATCM to Reduce Emissions of Toxic Air Contaminants from Outdoor Residential Waste Burning
17 CCR § 93115	ATCM for Stationary Compression Ignition Engines
17 CCR § 93116	ATCM for Portable Diesel-Fueled Engines
Part 63	**District Rules and Regulations Appendix B - National Emission Standards for Hazardous Air Pollutants (NESHAP) For Source Categories**
A	General Provisions
N	Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks
O	Ethylene Oxide Sterilization Facilities
R	Gasoline Distribution
T	Halogenated Solvent Cleaning
DD	Off-site Waste & Recovery Operations
GG	Aerospace Manufacturing and Rework Facilities
II	Shipbuilding and Ship Repair (Surface Coating)
JJ	Wood Furniture Manufacturing Operations
VVV	Publicly Owned Treatment Works
AAAA	Municipal Solid Waste Landfills
EEEE	Organic Liquids Distribution (non-gasoline)
MMMM	Surface Coating of Miscellaneous Metal Parts and Products
PPPP	Plastic Parts (surface coating)
SSSS	Surface Coating of Metal Coil
VVVV	Boat Manufacturing
WWWW	Reinforced Plastic Composites Production
YYYY	Stationary Combustion Turbines
ZZZZ	Stationary Reciprocating Internal Combustion Engines
DDDDD	Industrial, Commercial, and Institutional Boilers and Process Heaters

GGGGG	Site Remediation
HHHHH	Miscellaneous Coating Manufacturing
PPPPP	Engine Test Cells/Stands
WWWWW	Hospital Ethylene Oxide Sterilizers Area Sources
BBBBBB	Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities
CCCCCC	Gasoline Dispensing Facilities
HHHHHH	Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
JJJJJJ	Area Sources: Industrial, Commercial, and Institutional Boilers
QQQQQQ	Wood Preserving Area Sources
VVVVVV	Chemical Manufacturing Area Sources
WWWWWW	Plating and Polishing Operations Area Sources
XXXXXX	Metal Fabrication and Finishing Area Sources
AAAAAAA	Asphalt Processing and Asphalt Roofing Manufacturing Area Sources
CCCCCCC	Paint and Allied Products Manufacture Area Sources

1. Rule Citations marked with an "††" contain no substantive requirements and are listed for informational purposes only.
2. 'A/R' Denotes enforceability of the listed applicable requirement as follows:
   'F' Denotes a Federal applicable requirement that is federally enforceable and District enforceable.
   'D/F' Denotes a District applicable requirement which is pending SIP approval. For some rules, there are separate versions denoted as "F" and "D" which indicates when there is a SIP version of the rule, denoted by "F", which is federally enforceable, and an amended version of the rule which has been approved by the District but has not been approved into the SIP. At the time a pending rule is approved into the SIP, it will become fully federally enforceable and replace the previous version of the rule.
   'D' Denotes a District only applicable requirement. This may include some state requirements that are enforceable by the District.
3. District adoption dates marked with an "†" are the effective date of the rule, the actual adoption date is uncertain.
4. For rules 20.2-20.4 as marked with a "*", certain provisions were not submitted to EPA as denoted in the SIP submittals, and these provisions are therefore not federally enforceable
5. Rules 69.3 and 69.4 were repealed by the District because the applicable provisions were incorporated into Rules 69.3.1 and 69.4.1 which were submitted to EPA for SIP approval. However, these rules have not been approved due to concerns with startup/shutdown exemptions from emission limits.

APPENDIX C: ABBREVIATIONS THAT MAY APPEAR IN THIS PERMIT

APCO	Air Pollution Control Officer
ASTM	American Society for Testing and Methods
BACT	Best Available Control Technology
CAA	federal Clean Air Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO_2	Carbon Dioxide
District	San Diego County Air Pollution Control District
EF	Emission Factor
EPA	US Environmental Protection Agency
HAP	Hazardous Air Pollutant
I&M	Inspection and Maintenance
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
[NSR]	New Source Review based condition
NO_x	Oxides of nitrogen
O_2	Oxygen
OES	Office of Environmental Services
O&M	Operation and maintenance
Pb	Lead
PM	Total Particulate Matter
PM_{10}	Particulate matter with aerodynamic equivalent diameter of ≤ 10 microns
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SDCAPCD	San Diego County Air Pollution Control District
SIP	State Implementation Plan
SO_x	Oxides of sulfur
Title IV	Title IV of the federal Clean Air Act
Title V	Title V of the federal Clean Air Act
VOC	Volatile organic compound

Units of Measure:

dscf	=	Dry standard cubic foot
g	=	grams
gal	=	gallon
gr/dscf	=	Grains per dry standard cubic foot
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
min	=	minute
MM Btu	=	Million British thermal units
psia	=	pounds per square inch, absolute
scf	=	Standard cubic foot
scfm	=	standard cubic feet per minute
yr	=	year