



**TITLE V FEDERAL OPERATING PERMIT
AND
SMAQMD RULE 201 PERMITS TO OPERATE**

**TITLE V PERMIT NO:
TV2010-16-01**

**PERMIT
ISSUED:**

June 14, 2011

**PERMIT
LAST AMENDED:**

N/A

**PERMIT
EXPIRES:**

June 14, 2016

ISSUED TO:

University of California, Davis Medical Center
4800 2nd Avenue, Suite 2500
Sacramento, CA 95817

FACILITY LOCATION:

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NATURE OF BUSINESS:

Medical Hospital

**STANDARD INDUSTRIAL
CLASSIFICATION (SIC):**

8062

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by: _____
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I. PERMIT SUMMARY

This permit shall serve as a Permit to Operate pursuant to SMAQMD Rule 201 (General Permit Requirements) and SMAQMD Rule 207 (Title V - Federal Operating Permit Program). Requirements identified in the permit as non-federally enforceable are not enforceable by U.S. EPA or the public. However, they are enforceable by the SMAQMD.

The permittee's application for this air quality Permit to Operate was evaluated for compliance with SMAQMD, State of California, and federal air quality rules and regulations. The following listed rules are those that were found to be applicable at the time of permit review based on the information submitted with the Title V permit application.

Citation	Description	Rule Adoption Date	Federally Enforceable?
SMAQMD Rule 101	General Provisions and Definitions	09-03-1998	Yes
SMAQMD Rule 102	Circumvention	11-29-1983	Yes
SMAQMD Rule 105	Emission Statements	09-05-1996	Yes
SMAQMD Rule 201	General Permit Requirements (SIP approved)	11-20-1984	Yes
SMAQMD Rule 201	General Permit Requirements (Not SIP approved)	08-24-2006	No
SMAQMD Rule 202	New Source Review (SIP approved)	11-20-1984	Yes
SMAQMD Rule 202	New Source Review (Not SIP approved)	02-24-2005	No
SMAQMD Rule 207	Title V - Federal Operating Permit Program (Not SIP approved but rule is applicable as part of U.S. EPA approval of the SMAQMD Title V program)	04-26-2001	Yes
SMAQMD Rule 301	Permit Fees - Stationary Source (Not SIP approved but Title V fees in rule applicable as part of U.S. EPA approval of the SMAQMD Title V program)	08-01-2008	Yes (Title V provisions only)
SMAQMD Rule 306	Air Toxic Fees	03-27-2003	No
SMAQMD Rule 307	Clean Air Act Fees	09-26-2002	Yes

I. PERMIT SUMMARY (continued)

Citation	Description	Rule Adoption Date	Federally Enforceable?
SMAQMD Rule 401	Ringelmann Chart	04-19-1983	Yes
SMAQMD Rule 402	Nuisance	08-03-1977	No
SMAQMD Rule 403	Fugitive Dust	11-29-1983	Yes
SMAQMD Rule 404	Particulate Matter	11-20-1984	Yes
SMAQMD Rule 406	Specific Contaminants	11-29-1983	Yes
SMAQMD Rule 407	Open Burning	11-29-1983	Yes
SMAQMD Rule 411	Boiler NOx (SIP approved)	08-23-2007	Yes
SMAQMD Rule 412	Stationary Internal Combustion Engines Located at Major Stationary Sources of NOx	06-01-1995	Yes
SMAQMD Rule 413	Stationary Gas Turbines (SIP approved)	05-01-1997	Yes
SMAQMD Rule 413	Stationary Gas Turbines (Not fully SIP approved)	03-24-2005	No (C)
SMAQMD Rule 414	Natural Gas Fired Water Heaters	08-01-1996	Yes
SMAQMD Rule 420	Sulfur Content of Fuels	11-29-1983	Yes
SMAQMD Rule 441	Organic Solvents	11-29-1983	Yes
SMAQMD Rule 442	Architectural Coatings (SIP approved)	09-05-1996	Yes
SMAQMD Rule 442	Architectural Coatings (Not SIP approved)	05-24-2001	No
SMAQMD Rule 448	Gasoline Transfer into Stationary Storage Containers (SIP approved)	02-02-1995	Yes
SMAQMD Rule 448	Gasoline Transfer into Stationary Storage Containers (Not SIP approved)	02-26-2009	No

I. PERMIT SUMMARY (continued)

Citation	Description	Rule Adoption Date	Federally Enforceable?
SMAQMD Rule 449	Transfer of Gasoline into Vehicle Fuel Tanks (SIP approved)	09-26-2002	Yes
SMAQMD Rule 449	Transfer of Gasoline into Vehicle Fuel Tanks (Not SIP approved)	02-26-2009	No
SMAQMD Rule 451	Surface Coating of Miscellaneous Metal Parts and Products (SIP approved)	11-29-1983	Yes
SMAQMD Rule 451	Surface Coating of Miscellaneous Metal Parts and Products (Not SIP approved)	10-28-2010	No
SMAQMD Rule 454	Degreasing Operations	9-25-2008	Yes
SMAQMD Rule 460	Adhesives and Sealants (Not SIP approved)	11-30-2000	No
SMAQMD Rule 463	Wood Products Coatings	09-25-2008	Yes
SMAQMD Rule 466	Solvent Cleaning (SIP approved)	05-23-2002	Yes
SMAQMD Rule 466	Solvent Cleaning (Not SIP approved)	10-28-2010	No
SMAQMD Rule 601	Procedure Before the Hearing Board (Not SIP approved)	02-05-1998	No
SMAQMD Rule 602	Breakdown Conditions: Emergency Variance (Not SIP approved)	12-06-1978	No
SMAQMD Rule 801 NSPS	40 CFR 60 Subpart Dc NSPS for Small Industrial – Commercial - Institutional Steam Generating Units (SMAQMD rule is not SIP approved but there is an equivalent enforceable federal regulation)	09-12-1990 (A) 01-28-2009 -- Latest Amendment	Yes (40 CFR 60 Subpart Dc)

I. PERMIT SUMMARY (continued)

Citation	Description	Rule Adoption Date	Federally Enforceable?
SMAQMD Rule 801 NSPS	40 CFR 60 Subpart GG NSPS for Stationary Gas Turbines (SMAQMD rule is not SIP approved but there is an equivalent enforceable federal regulation.)	06-27-1989 (A) 10-17-2000 – Latest Amendment	Yes (40 CFR 60 Subpart GG)
SMAQMD Rule 801 NSPS	40 CFR 60 Subpart IIII NSPS for Stationary Compression Ignition Internal Combustion Engines (SMAQMD rule is not SIP approved but there is an equivalent enforceable federal regulation.)	07-11-2006 (A) 07-01-2010 – Latest Amendment	Yes (40 CFR 60 Subpart IIII)
SMAQMD Rule 904 and CARB Air Toxic Control Measure	State of California Air Toxic Control Measure for Chromate Treated Cooling Towers [CCR 93103]	03-09-1989 (B)	No
SMAQMD Rule 904 and CARB Air Toxic Control Measure	State of California Air Toxic Control Measure for Stationary Compression Ignition Engines [CCR 93115]	10-18-2007 (B)	No
U.S. EPA NESHAP	40 CFR 63 Subpart ZZZZ NESHAP for Reciprocating Internal Combustion Engines	06-15-2004	Yes (40 CFR 63 Subpart ZZZZ)

- (A) U.S. EPA initial promulgation date.
- (B) CARB adoption date.
- (C) A portion of the rule is not SIP approved.

Future changes in prohibitory rules may establish more stringent requirements that may, at the SMAQMD level, supersede the conditions listed here. For Title V purposes however, the federally enforceable requirements are those found in the Title V permit. Federally enforceable provisions of the Title V permit do not change until the Title V permit is revised.

II. FACILITY DESCRIPTION

Title V Permit Background

The following permit actions have occurred since the initial Title V Federal Operating Permit No. 1996-01-01 was issued:

<u>Permit Action</u>	<u>Date Issued</u>	<u>Permit No.</u>
Initial Title V Federal Operating Permit	06-14-2001	TV1999-16-01
1st Minor Modification	04-09-2002	TV1999-16-02
2nd Minor Modification	03-18-2003	TV1999-16-03
3rd Minor Modification	08-10-2004	TV1999-16-04
4th Minor Modification	07-11-2005	TV1999-16-05
1st Permit Renewal	06-14-2006	TV2005-16-01
1st Minor Modification	06-08-2010	TV2005-16-02

Current Permitting Action

This 2nd Permit Renewal will be assigned the following permit number: TV2010-16-01.

Facility Description

The University of California, Davis operates the UC Davis Medical Center in Sacramento. The UC Davis Medical Center is a health care provider for the community and a teaching hospital for the UC Davis School of Medicine.

The UC Davis Medical Center is located on 140 acres in central Sacramento, three miles from the state Capitol and 20 miles from the main UC Davis campus. The University established the Medical Center in 1973 to support the clinical and research missions of the then new UC Davis School of Medicine. Licensed for 613 beds and fully accredited, UC Davis Medical Center is one of the region's Level I comprehensive adult and pediatric trauma center.

Electrical power for the facility is generated from an on-site cogeneration central power plant. The electrical generation plant uses a natural gas fueled gas turbine to generate electricity. Heat generated from the equipment is captured and used to produce steam for heating and cooling. In addition, four large boilers (with emergency use diesel fuel) and eight smaller natural gas fueled boilers provide steam when the gas turbine capacity is exceeded or the gas turbine is out of service.

Emergency electrical power is provided by ten diesel fueled internal combustion engines driving electrical generators. Emergency water pumping for fire fighting is provided by one internal combustion engine driving a fire pump.

A gasoline dispensing facility is used to fuel vehicles that are used both on-site and off-site.

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

TITLE V PERMIT MODIFICATIONS AND RENEWAL

1. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for renewal no later than 12 months prior to the expiration date of the Title V permit.
[Basis: SMAQMD Rule 207 Section 301.4]
2. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for minor Title V permit modification when applicable. The application shall be submitted after receiving any required preconstruction permit from the SMAQMD and before commencing operation associated with the Minor Title V permit modification.
[Basis: SMAQMD Rule 207 Section 301.6]
3. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for Significant Title V permit modification when applicable. The application shall not be submitted prior to receiving any required preconstruction permit from the SMAQMD but no later than 12 months after commencing an operation associated with the Significant Title V permit modification. Where an existing federally enforceable Title V permit condition would prohibit such change in operation or the stationary source is not required to obtain a preconstruction permit, the owner or operator must obtain a Title V permit modification before commencing operation.
[Basis: SMAQMD Rule 207 Section 301.7]
4. The permittee shall submit to the SMAQMD Air Pollution Control Officer timely updates to the Title V application as new applicable federal requirements become applicable to the source.
[Basis: SMAQMD Rule 207 Section 302.1]
5. The permittee shall submit to the SMAQMD Air Pollution Control Officer any additional information necessary to correct any incorrect information in the Title V permit application upon becoming aware of such incorrect submittal or if the applicant is notified by the SMAQMD Air Pollution Control Officer of such incorrect submittal.
[Basis: SMAQMD Rule 207 Section 302.2]
6. The permittee shall submit to the SMAQMD Air Pollution Control Officer any additional information relating to the Title V application within 30 days if such information is requested in writing by the SMAQMD Air Pollution Control Officer.
[Basis: SMAQMD Rule 207 Section 302.3]
7. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted and the stationary source complies with SMAQMD Rule 207 Sections 303.1(a), (b), (c) and (d), in which case the existing Title V permit will remain in effect until the Title V permit renewal has been issued or denied.
[Basis: SMAQMD Rule 207 Section 303.2]

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

8. Any Title V application form, report, or compliance certification submitted pursuant to a federally enforceable requirement in this permit shall contain certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[Basis: SMAQMD Rule 207 Section 304]

9. This Title V permit shall have a 5-year fixed term from the date of issuance. The Title V permit shall have a new 5-year fixed term from the date of final action on reopening if the responsible official chooses to submit to the SMAQMD a complete Title V application for renewal upon reopening of the Title V permit pursuant to SMAQMD Rule 207 Sections 411 or 412, and the Title V permit is renewed according to the administrative procedures listed in SMAQMD Rule 207 Sections 401 through 408.

[Basis: SMAQMD Rule 207 Section 306]

PERMIT COMPLIANCE

10. The permittee shall comply with all conditions of the Title V permit.

[Basis: SMAQMD Rule 207 Section 305.1(k)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the Title V permit.

[Basis: SMAQMD Rule 207 Section 305.1(k)(2)]

12. This Title V permit may be modified, revoked, reopened, and reissued, or terminated for cause.

[Basis: SMAQMD Rule 207 Section 305.1(k)(3)]

13. The permittee shall furnish to the SMAQMD Air Pollution Control Officer, within a reasonable time, any information that the SMAQMD Air Pollution Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit pursuant to SMAQMD Rule 207 Section 411, or to determine compliance with this Title V permit.

Upon request, the permittee shall also furnish to the SMAQMD Air Pollution Control Officer copies of records required to be kept by conditions of this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality.

[Basis: SMAQMD Rule 207 Section 305.1(k)(4)]

14. Noncompliance with any federally enforceable requirement in this Title V permit is grounds for Title V permit termination, revocation and reissuance, modification, enforcement action or denial of the Title V permit renewal application. Any violation of the Title V permit shall also be a violation of SMAQMD Rule 207.

[Basis: SMAQMD Rule 207 Section 305.1(k)(5)]

15. A pending Title V permit action (e.g. a proposed permit revision) or notification of anticipated noncompliance does not stay any permit condition.

[Basis: SMAQMD Rule 207 Section 305.1(k)(6)]

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

16. This Title V permit does not convey any property rights of any sort or any exclusive privilege.
[Basis: SMAQMD Rule 207 Section 305.1(k)(7)]
17. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the SMAQMD Air Pollution Control Officer or an authorized representative to perform all of the following:
- A. Enter upon the stationary source's premises where this source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Title V permit;
 - C. Inspect at reasonable times, the stationary source, equipment (including monitoring and air pollution control equipment), practices and operations regulated or required under this Title V permit, and;
 - D. As authorized by the Federal Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the Title V permit conditions or applicable federal requirements.
- [Basis: SMAQMD Rule 207 Section 413.1]**

REPORTS AND RECORDKEEPING

18. Monitoring Reports

- A. The permittee shall submit to the SMAQMD Air Pollution Control Officer at least once every six months, unless required more frequently by an applicable requirement, reports of all required monitoring.
 - i. All instances of deviations from Title V permit monitoring conditions must be clearly identified in such reports.
- B. The reporting periods for this permit shall be January 01 through June 30 and July 01 through December 31. The reports shall be submitted by July 30 and January 30 following each reporting period respectively.
- C. All required reports must be certified by the responsible official and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[Basis: SMAQMD Rule 207 Section 501.1]

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

19. Compliance Reports

- A. The permittee shall submit to the SMAQMD Air Pollution Control Officer and U.S. EPA (Air-3, U.S. EPA, Region IX) on an annual basis, unless required more frequently by additional applicable federal requirements such as Section 114(a)(3) and 504(b) (42 U.S.C. Sections 7414(a)(3) and 7661c(b)) of the Federal Clean Air Act, a certification of compliance by the responsible official with all terms and conditions contained in the Title V permit, including emission limitations, standards and work practices.
- B. The reporting period for this permit shall be January 01 through December 31. The report shall be submitted by January 30 following the reporting period.
- C. All required reports must be certified by the responsible official and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- D. The Compliance Certification Report shall include the following:
 - i. The identification of each term or condition of the Title V permit that is the basis of the certification.
 - ii. The method(s) used for determining the compliance status of the source, currently and over the reporting period, and whether such method(s) provides continuous or intermittent data.
 - iii. The status of compliance with the terms and conditions of the Title V permit for the period covered by the certification, based on the method designated in Section D.ii of this condition.
 - iv. Such other facts as the SMAQMD Air Pollution Control Officer may require to determine the compliance status of the source.
 - v. In accordance with SMAQMD Rule 207 Section 305, a method for monitoring the compliance of the stationary source with its emissions limitations, standards and work practices.

[Basis: SMAQMD Rule 207 Section 413.4]

- 20. The permittee shall report, within 24 hours of detection, any deviation from a federally enforceable Title V permit condition not attributable to an emergency. In order to fulfill the reporting requirement of this condition, the permittee shall notify the SMAQMD Air Pollution Control Officer by telephone followed by a written statement describing the nature of the deviation from the federally enforceable permit condition.

[Basis: SMAQMD Rule 207 Section 501.3]

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

21. All monitoring data and support information required by a federally enforceable applicable requirement must be kept by the permittee for a period of 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the federally enforceable applicable requirements in the Title V permit.

[Basis: SMAQMD Rule 207 Section 502.3]

RINGELMANN CHART

22. Except as otherwise provided in SMAQMD Rule 401 Section 100, the permittee shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is:

- A. As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
- B. Of such opacity as to obscure a human observer's view, or a certified calibrated in-stack opacity monitoring system to a degree equal to or greater than No. 1 on the Ringelmann Chart.

[Basis: SMAQMD Rule 401 Section 301]

PARTICULATE MATTER

23. The permittee shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

- A. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.
- B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles and other surfaces which can give rise to airborne dusts;
- C. Other means approved by the SMAQMD Air Pollution Control Officer.

[Basis: SMAQMD Rule 403 Section 301]

24. Except as otherwise provided in SMAQMD Rule 406, the permittee shall not discharge into the atmosphere, from any source, particulate matter in excess of 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot).

[Basis: SMAQMD Rule 404 Section 301]

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

25. A person shall not discharge into the atmosphere particulate matter from the burning of any kind of material containing carbon in a free or combined state, from any single source of emission whatsoever, combustion contaminants in any state or combination thereof exceeding in concentration at the point of discharge: 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot) of gas calculated to 12% carbon dioxide (CO₂) at standard conditions.
[SMAQMD Rule 406 Section 302]

SULFUR COMPOUNDS

26. A person shall not discharge into the atmosphere from any single source of emission whatsoever sulfur compounds in any state or combination thereof exceeding in concentration at the point of discharge: sulfur compounds, calculated as sulfur dioxide (SO₂): 0.2% by volume.
[SMAQMD Rule 406 Section 301]

27. Except as otherwise provided in Section 110 of Rule 420, a person shall not burn any gaseous fuel containing sulfur compounds in excess of 1.14 grams per cubic meter (50 grains per 100 cubic feet) of gaseous fuel, calculated as hydrogen sulfide at standard conditions, or any liquid fuel or solid fuel having a sulfur content in excess of 0.5% by weight.
[SMAQMD Rule 420 Section 301]

ARCHITECTURAL COATING AND SOLVENT CLEANING

28. Any coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs, shall meet the requirements of SMAQMD Rule 442.
[Basis: SMAQMD Rule 442 (09-05-1996 version)]
29. All VOC-containing materials used for architectural coating, including clean-up, shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired.
[Basis: SMAQMD Rule 442 Section 304 (09-05-1996 version)]
30. The permittee shall comply with the requirements of SMAQMD Rule 466 Solvent Cleaning when using volatile organic compounds for the cleanup of architectural coating application equipment or for other applications of solvent cleaning at the facility.
[Basis: SMAQMD Rule 466 (10-28-2010 version, submitted to EPA pending approval)]
31. The permittee shall keep a record of all architectural coatings purchased that are not clearly labeled as complying with the VOC content limits contained in SMAQMD Rule 442. Compliance in these cases can be determined by maintaining records of the manufacturer's certifications or by Material Safety Data Sheets (MSDS) that demonstrate compliance with the VOC limits of SMAQMD Rule 442.
[Basis: SMAQMD Rule 442 (09-05-1996 version)]

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

COMPLIANCE

32. Compliance with the conditions of the Title V permit shall be deemed compliance with all applicable requirements identified in the Title V permit.

[Basis: SMAQMD Rule 207 Section 307]

EQUIPMENT BREAKDOWNS

33. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology based emission limitations if the following conditions are met:

A. The affirmative defense of an emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i. An emergency occurred and that the permittee can identify the cause(s) of the emergency.
- ii. The permitted facility was at the time being properly operated.
- iii. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Title V permit.
- iv. The permittee submitted notice of the emergency to the SMAQMD Air Pollution Control Officer within two working days of the time when emissions limitations were exceeded due to the emergency. The notice must contain a description of the emergency and corrective actions taken.

B. In any enforcement proceedings, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[Basis: SMAQMD Rule 207 Section 414]

34. The permittee shall notify the SMAQMD Air Pollution Control Officer of any occurrence which constitutes an emergency as defined in SMAQMD Rule 207 Section 212 as soon as reasonably possible, but no later than one hour after its detection. If the emergency occurs when the SMAQMD Air Pollution Control Officer cannot be contacted, the report of the emergency shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved and, to the extent known, the cause(s) of the occurrence.

[Basis: SMAQMD Rule 207 Section 501.2]

PAYMENT OF FEES

35. The fee for (1) the issuance of an initial Title V operating permit, (2) the renewal and/or inspection of a Title V operating permit, (3) the modification of a Title V operating permit or (4) an administrative Title V permit amendment shall be based on the actual hours spent by the

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

SMAQMD staff in evaluating the application and processing the operating permit. The fee shall be assessed in accordance with the hourly rate established in SMAQMD Rule 301 Section 308.12.

[Basis: SMAQMD Rule 207 Section 305.7 and SMAQMD Rule 301 Section 313]

36. After the provisions for granting permits as set forth in SMAQMD Rule 207 have been complied with, the permittee will be notified by mail of the fee due and payable and the date the fee is due. If the fee is not paid by the specified due date, the fee shall be increased by one half the amount and the applicant/permittee shall be notified by mail of the increased fee. If the increased fee is not paid within 30 days after notice the application/permit will be canceled/revoked and the applicant/permittee will be notified by mail.

[Basis: SMAQMD Rule 207 Section 305.7]

ACCIDENTAL RELEASES

37. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities and accident prevention regulations promulgated under 40 CFR Part 68 do not limit in any way the general duty provisions under Section 112(r)(1) of the federal Clean Air Act of 1990.

[Basis: 40 CFR 68]

38. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall comply with the requirements of 40 CFR Part 68 no later than the latest of the following dates as provided in 68.10(a):

A. June 21, 1999,

B. Three years after the date on which a regulated substance is first listed under 68.130, or

C. The date on which a regulated substance is first present above a threshold quantity in a process.

[Basis: 40 CFR 68]

39. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.

[Basis: 40 CFR 68]

40. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) of the federal Clean Air Act of 1990 as part of the annual compliance certification as required by SMAQMD Rule 207 Section 413.4.

[Basis: 40 CFR 68]

III. FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

TITLE VI REQUIREMENTS (OZONE DEPLETING SUBSTANCES)

41. The permittee, when opening appliances containing CFCs for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156.
[Basis: 40 CFR 82 Subpart F]
42. Equipment used during the maintenance, service, repair or disposal of appliances containing CFCs must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
[Basis: 40 CFR 82 Subpart F]
43. The permittee, when performing maintenance, service, repair or disposal of appliances containing CFCs must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
[Basis: 40 CFR 82 Subpart F]

EMISSION STATEMENTS

44. The permittee, when operating any stationary source that emits 25 tons or more per year of ROC or NOx, shall annually provide the SMAQMD Air Pollution Control Officer with a written emission statement showing actual emissions of ROC and NOx from that source.
[Basis: SMAQMD Rule 105]

CLEAN AIR ACT FEES

45. After the U.S. EPA determines that the SMAQMD has failed to demonstrate attainment of the one hour ozone ambient air quality standard by the attainment year, the permittee, operating any major stationary source of ROC or NOx, shall pay the Clean Air Act fees specified by the SMAQMD Air Pollution Control Officer in accordance with SMAQMD Rule 307.
[Basis: SMAQMD Rule 307]

PERMIT SHIELD

46. All boilers specified in this permit that are fired with diesel fuel as emergency fuel are not required to comply with the requirements of SMAQMD Rule 411, Sections 302 and 403. Section 302 requires emissions not to exceed 40 ppmvd NOx at 3% oxygen and 400 ppmvd CO at 3% oxygen. Section 403 requires source testing within specific time limits.

IV. NON-FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

APPLICABILITY:

1. The requirements outlined in this section pertain to the SMAQMD Rule 201 Permit to Operate and are not part of the Title V permit.

LOCAL PERMIT RENEWAL:

2. Permits to Operate issued to the permittee, pursuant to SMAQMD Rule 201 (non-Title V permits to operate), shall be renewed annually on January 16 and upon payment of the permit renewal fee established pursuant to SMAQMD Rule 301.
3. The SMAQMD Air Pollution Control Officer shall review every SMAQMD Rule 201 Permit to Operate upon annual renewal, pursuant to California Health and Safety Code Section 42301(c), to determine that permit conditions are adequate to ensure compliance with, and the enforceability of, SMAQMD rules and regulations applicable to the article, machine, equipment or contrivance for which the permit was issued. Applicable SMAQMD rules and regulations shall include those which were in effect at the time the permit was issued or modified, or which have subsequently been adopted and made retroactively applicable to an existing article, machine, equipment or contrivance, by the SMAQMD Board of Directors. The SMAQMD Air Pollution Control Officer shall revise the conditions, if such conditions are not consistent, in accordance with all applicable rules and regulations.

GENERAL

4. The SMAQMD Air Pollution Control Officer and/or authorized representatives, upon the presentation of credentials shall be permitted:
 - A. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this permit to operate, and
 - B. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Permit to Operate, and
 - C. To inspect any equipment, operation, or method required in this Permit to Operate, and
 - D. To sample emissions from the source or require samples to be taken.
5. Legible copies of all SMAQMD Rule 201 permits shall be maintained on the premises with the equipment.

EQUIPMENT OPERATION:

6. The equipment shall be properly maintained and operated in accordance with the manufacturer's recommendations at all times.

IV. NON-FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

7. This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the Health and Safety Code of the State of California or the Rules and Regulations of the SMAQMD.
8. The equipment shall not discharge such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

EQUIPMENT BREAKDOWNS:

9. The permittee shall notify the SMAQMD Air Pollution Control Officer of any occurrence which constitutes a breakdown as defined in SMAQMD Rule 602 Section 201 as soon as reasonably possible, but no later than one hour after its detection. If the breakdown occurs when the SMAQMD Air Pollution Control Officer cannot be contacted, the report of breakdown shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved, and to the extent known the cause(s) of the occurrence.
10. Upon notification of the breakdown condition, the SMAQMD Air Pollution Control Officer shall investigate the breakdown condition in accordance with uniform written procedures and guidelines relating to logging of initial reports on appropriate forms, investigation, and enforcement follow-up. If the occurrence does not constitute a breakdown condition, the SMAQMD Air Pollution Control Officer may take appropriate enforcement action.
11. An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) shall constitute a violation of any applicable emission limitation or restriction prescribed by SMAQMD Rules and Regulations; however, the SMAQMD Air Pollution Control Officer may elect to take no enforcement action if the owner or operator demonstrates to his satisfaction that a breakdown condition exists and the following requirements are met:
 - A. The notification required in SMAQMD Rule 602 Section 301.1 is made; and
 - B. Immediate appropriate corrective measures are undertaken and compliance is achieved, or the process is shutdown for corrective measures before commencement of the next production run or within 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment for which the period shall be 96 hours). If the owner or operator elects to shut down rather than come into immediate compliance, (s)he must nonetheless take whatever steps are possible to minimize the impact of the breakdown within the 24 hour period; and
 - C. The breakdown does not interfere with the attainment and maintenance of any national ambient air quality standard.

IV. NON-FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

12. An occurrence which constitutes a breakdown condition shall not persist longer than the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours), unless an emergency variance has been obtained.
13. If the breakdown condition will either require more than 24 hours to correct or persists longer than the end of the production run (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) the owner or operator may, in lieu of shutdown, request the SMAQMD Air Pollution Control Officer to commence the emergency variance procedure set forth in SMAQMD Rule 602 Section 304.
14. No emergency variance shall be granted unless the chairperson of the SMAQMD Hearing Board or other designated member(s) of the SMAQMD Hearing Board finds that:
 - A. The occurrence constitutes a breakdown condition;
 - B. Continued operation is not likely to create an immediate threat or hazard to public health or safety; and
 - C. The requirements for a variance set forth in California Health & Safety Code Sections 42352 and 42353 have been met;
 - D. The continued operation in a breakdown condition will not interfere with the attainment or maintenance of the national ambient air quality standards.
15. At any time after an emergency variance has been granted, the SMAQMD Air Pollution Control Officer may request for good cause that the chairperson or designated member(s) reconsider and revoke, modify or further condition the variance. The procedures set forth in SMAQMD Rule 602 Section 304.1 shall govern any further proceedings conducted under this condition.
16. An emergency variance shall remain in effect only for as long as necessary to repair or remedy the breakdown condition, but in no event after a properly noticed hearing to consider an interim or 90 day variance has been held, or 15 days from the date of the subject occurrence, whichever is sooner.
17. Within one week after a breakdown condition has been corrected, the owner or operator shall submit a written report to the SMAQMD Air Pollution Control Officer on forms supplied by the SMAQMD Air Pollution Control Officer describing the causes of the breakdown, corrective measures taken, estimated emissions during the breakdown and a statement that the condition has been corrected, together with the date of correction and proof of compliance. The SMAQMD Air Pollution Control Officer may, at the request of the owner or operator for good cause, extend up to 30 days the deadline for submittal of the report described in this condition.

IV. NON-FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

18. The burden of proof shall be on the owner or operator of the source to provide sufficient information to demonstrate that a breakdown did occur. If the owner or operator fails to provide sufficient information, the SMAQMD Air Pollution Control Officer shall undertake appropriate enforcement action.
19. Any failure to comply, or comply in a timely manner, with the reporting requirements established in SMAQMD Rule 602 Sections 301.1 and 401 shall constitute a separate violation of SMAQMD Rule 602.
20. It shall constitute a separate violation of SMAQMD Rule 602 for any person to file with the SMAQMD Air Pollution Control Officer a report which falsely, or without probable cause, claims that an occurrence is a breakdown condition.

ARCHITECTURAL COATING

21. Unless applied by an aerosol can or contained within a volume of one liter or less any person who supplies, sells, offers for sale or manufactures any architectural coating for use within the District, as well as any person who applies or solicits the application of any architectural coating within the District shall meet the requirements of SMAQMD Rule 442.
[Basis: SMAQMD Rule 442 (05-24-2001 version)]

V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR POLLUTION CONTROL SYSTEMS FOR NO_x AND CO

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

Gas Turbine

P/O No. 17549 (for reference purposes only - not federally enforceable)
 Manufacturer: General Electric
 Model: LM 2500
 Type: Combined Cycle
 Heat Input: 260 MMBTU/hour
 Fuel: Natural gas (no emergency use fuel)
 Cooling towers: Cooling Towers (4), Tower Engineering, 9500 gpm/cell

Air Pollution Control System for NO_x

P/O No. 10909 (for reference purposes only - not federally enforceable)
 Manufacturer: Babcock and Wilcox
 Type: Water Injection and Selective Catalytic Reduction

Air Pollution Control System for CO

P/O No. 10910 (for reference purposes only - not federally enforceable)
 Manufacturer: Engelhard Corporation
 Model: Catco 620HC
 Type: Oxidation Catalyst

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this subsection are enforceable by the SMAQMD, U.S. EPA and the public.

EMISSION LIMITS

1. Emissions from the gas turbine operation shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Maximum Allowable Emissions			
	Concentration (A) (ppmvd at 15% O ₂)	Hourly (B) (lb/hr)	Daily (C) (lb/day)	Quarterly (D) (lb/quarter)
ROC	NA	NA	144	13,248
NO _x	5	4.80	115	10,580
SO ₂	NA	NA	3.8	350
PM ₁₀ (E)	NA	NA	66.5	6,118
CO	NA	9.25	222	20,424

V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR POLLUTION CONTROL SYSTEMS FOR NO_x AND CO

Pollutant	Maximum Allowable Emissions			
	Concentration (A) (ppmvd at 15% O ₂)	Hourly (B) (lb/hr)	Daily (C) (lb/day)	Quarterly (D) (lb/quarter)
NH ₃	20	NA	172.8	15,898

- (A) Averaged over any consecutive three hour period, excluding start-ups as defined in Condition No. 6.
- (B) Averaged over any consecutive three hour period, excluding start-ups as defined in Condition No. 6.
- (C) Based on operating at 260 MMBTU/hr maximum capacity and 24 hours/day.
- (D) Based on operating for 92 days at maximum daily allowable emission.
- (E) Includes PM₁₀ from operation of the cooling towers.

2. Combined emissions from the following equipment shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Permit Number	Equipment	Maximum Allowable Combined Emissions (A) lb/day		
		NO _x	ROC	PM ₁₀
21510	Gasoline dispensing	150	150	80
12979	Boilers (8), 3.2 MMBTU/hr			
17549	Gas turbine and associated cooling towers, 260 MMBTU/hr			
20216	Boiler No. 1, 31.5 MMBTU/hr			
20217	Boiler No. 2, 31.5 MMBTU/hr			
20218	Boiler No. 3, 31.5 MMBTU/hr			
20219	Boiler No. 4, 31.5 MMBTU/hr			

(A) Compliance with these emission limitations shall be determined by using the calculation methods specified in Attachment A.

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS

- 3. The gas turbine shall only combust natural gas fuel.
[Basis: SMAQMD Rules 201 and 202]
- 4. The gas turbine shall not combust more than 260 MMBTU/hr (hhv) of natural gas.
[Basis: SMAQMD Rules 201 and 202]
- 5. The gas turbine shall not be operated without a fully functioning selective catalytic reduction system (P/O 10909) and oxidation catalyst system (P/O 10910), excluding periods of startup, as defined in Condition No. 6, and shutdowns.
[Basis: SMAQMD Rules 201 and 202]

V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR POLLUTION CONTROL SYSTEMS FOR NO_x AND CO

6. The startup period of the gas turbine is defined as the time when fuel is first introduced to the gas turbine to the time when:

A. NO_x emissions are equal to or less than 5 ppmvd at 15% O₂ and

B. NH₃ emissions are equal to or less than 20 ppmvd at 15% O₂.

**The duration of the gas turbine's startup period shall not exceed 60 minutes.
[Basis: SMAQMD Rules 201 and 202]**

7. The total dissolved solids content of the circulating cooling water shall not exceed 2,850 ppmw or a conductivity that exceeds 4,750 micro mhos.

[Basis: SMAQMD Rules 201 and 202]

8. The cooling tower drift rate shall not exceed 0.0005%.

[Basis: SMAQMD Rules 201 and 202]

9. The permittee shall maintain an in-stack continuous emission monitoring system (CEMS) in the exhaust of the gas turbine that is approved by the SMAQMD Air Pollution Control Officer.

A. The CEMS shall monitor and record nitrogen oxides, carbon monoxide and either oxygen or carbon dioxide concentrations. UCDMC shall demonstrate that compliance with the applicable emission concentrations can be achieved through the monitoring of carbon dioxide to the satisfaction of the SMAQMD Air Pollution Control Officer before monitoring of carbon dioxide can be used in this capacity.

B. The CEMS shall comply with the U.S. EPA performance specifications (40 CFR 60 Appendix B, Performance Specifications 2, 3 and 4).

C. The CEMS shall not be required to monitor emissions, for a maximum of eight (8) hours per calendar quarter, while periodic scheduled maintenance is performed.

[Basis: SMAQMD Rules 201 and 202]

10. The permittee shall operate continuous monitoring systems, approved by the SMAQMD Air Pollution Control Officer, that either measure or calculate and record the following:

[Basis: SMAQMD Rules 201 and 202]

V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR POLLUTION CONTROL SYSTEMS FOR NO_x AND CO

Parameter to be Monitored	Units
A. Fuel consumption of the gas turbine.	MMcf/hr of natural gas
B. Exhaust gas flowrate of the gas turbine.	sdcfm
C. The total dissolved solids level or conductivity of the circulating water in the cooling towers.	ppmw or micro mhos

RECORDKEEPING AND REPORTING REQUIREMENTS

11. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Hourly and daily records shall be made available the following day. Monthly records shall be made available within 30 days of the end of the month.

[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be recorded
At all times	A. Date, time, and duration of any start-up, shutdown or malfunction in the operation of the gas turbine. B. Date, time, and duration of any malfunction of the air pollution control equipment. C. Date, time, and duration of any periods during which a CEMS or monitoring device is inoperative. D. Measurements from the CEMS. E. Measurements from monitoring devices. F. Measurements from performance testing. G. CEMS performance evaluations. H. CEMS or monitoring device calibration checks. I. Adjustments and maintenance performed on the CEMS or monitoring devices.

V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR POLLUTION CONTROL SYSTEMS FOR NO_x AND CO

Frequency	Information to be recorded
Hourly	<p>J. Total Natural gas fuel consumption of the gas turbine. (MMcf/hour)</p> <p>K. Exhaust gas flowrate of the turbine. (keep) (kdscf/hr)</p> <p>L. One or more readings of total dissolved solids content (ppmw) or conductivity (micro mhos) of the circulating water in the cooling towers.</p> <p>M. Gas turbine NO_x and CO emissions, averaged over a three hour period, not including start-ups as defined in Condition No. 6. (lb/hour)</p> <p>N. Gas turbine NO_x concentration, averaged over any consecutive three hour period, excluding start-ups as defined in Condition No. 6. (ppmvd at 15% O₂)</p>
Daily	<p>O. Total natural gas fuel consumption of the gas turbine. (MMcf/day)</p> <p>P. Date and quantity of the eight "California Special" boilers (P/O 12979) that operated at any time during the day.</p> <p>Q. Total NO_x, ROC and PM₁₀ emissions as described in Condition No. 2 using the calculation method specified in Attachment A. (pounds/day)</p> <p>1. Gas turbine (P/O 17549) and central power plant boiler (P/O 20216, 20217, 20218 and 20219) emissions shall be calculated daily and updated on a monthly basis to include "California Special" boiler (P/O 12979) emissions and average daily gasoline dispensing emissions (P/O 21510).</p>
Monthly	<p>R. Total amount of gasoline dispensed from the fuel facility (P/O 21510). (gallons/month)</p> <p>S. Daily average amount of gasoline dispensed calculated by dividing total monthly dispensed amount by the number of days in the month. (average gallons/day)</p>

V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR POLLUTION CONTROL SYSTEMS FOR NO_x AND CO

12. A written report shall be submitted to the SMAQMD Air Pollution Control Officer by the dates indicated and shall contain the following information.
[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be submitted
Quarterly by: January 30 April 30 July 30 September 30 for the previous calendar quarter	A. Whenever the CEMS is inoperative except for zero and span checks: <ul style="list-style-type: none"> i. Date and time identifying each period during which the CEMS was inoperative. ii. Nature of the CEMS repairs, adjustments or periodic maintenance. B. Whenever an emission occurs, as measured by the required CEMS, that is in excess of any emission limitation: <ul style="list-style-type: none"> i. Magnitude of the emission which has been determined to be in excess. ii. Date and time of the commencement and completion of each period of excess emissions iii. Periods of excess emissions due to start-up, shutdown and malfunction shall be specifically identified. iv. The nature and cause of any malfunction (if known). v. The corrective action taken or preventive measures adopted. C. When no excess emissions have occurred or the CEMS has not been inoperative, repaired or adjusted, such information shall be stated in the report.

V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR POLLUTION CONTROL SYSTEMS FOR NO_x AND CO

EMISSION TESTING REQUIREMENTS

13. A ROC, NO_x, PM₁₀, CO and ammonia (NH₃) source test of the gas turbine shall be performed each calendar year.
- A. Submit a Source Test Plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed.
 - B. Notify the SMAQMD Air Pollution Control Officer at least 7 days in advance of the actual source test date if the date has changed from that approved in the Source Test Plan.
 - C. During the source test, the gas turbine shall be operated at its maximum allowable firing capacity, as stated in Condition No. 4.
 - D. The Source Test Report shall be submitted to the SMAQMD Air Pollution Control Officer within 60 days from the completion of the source test.
 - E. The SMAQMD Air Pollution Control Officer may waive the annual PM₁₀ source test requirement if, in the SMAQMD Air Pollution Control Officer's sole judgment, prior test results indicate an adequate compliance margin has been maintained.

[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR
POLLUTION CONTROL SYSTEMS
FOR NO_x AND CO**

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

14. The cooling towers shall not use any water treatment chemicals containing chromium.
[Basis: State of California Air Toxic Control Measure for Chromate Treated Cooling Towers (CCR 93103)]
15. An ammonia (NH₃) source test of the gas turbine shall be performed each calendar year.
 - A. Submit a Source Test Plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed.
 - B. Notify the SMAQMD Air Pollution Control Officer at least 7 days in advance of the actual source test date if the date has changed from that approved in the Source Test Plan.
 - C. During the source test, the gas turbine shall be operated at its maximum allowable firing capacity, as stated in Condition No. 4.
 - D. The Source Test Report shall be submitted to the SMAQMD Air Pollution Control Officer within 60 days from the completion of the source test.
[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – GAS TURBINE AND AIR
 POLLUTION CONTROL SYSTEMS
 FOR NOx AND CO**

ATTACHMENT A

**ROC, NOx AND PM10 EMISSION CALCULATION METHODOLOGY
 FOR UCDMC PERMIT LIMITS**

Permit No.	Equipment	Rating	Daily Usage Units U	Emission Factor EF			Emission Calculation Method lb/day
				NOx	ROC	PM10	
21510	Gasoline dispensing	20,000 gallons capacity	1000 gallons	n/a	1.27 lb/Mgal (C)	n/a	= U x EF
12979	Boilers (8) California Specials	3.2 MMBTU/hr	Number of boilers operated/day	0.96 lb/boiler operated	0.03 lb/boiler operated	0.13 lb/boiler operated	= U x EF
17549	Gas turbine	260 MMBTU/hr Natural gas	MMBTU/day	n/a (Use CEMS data)	0.02308 lb/MMBTU	0.00962 lb/MMBTU	= U _T x EF _T
		Cooling towers (A)	each day used	n/a	n/a	6.5 lb/day	= U _{CT} x EF _{CT}
20216	Boiler No. 1	31.5 MMBTU/hr Natural gas	(Combined) MMBTU/day	0.0109 lb/MMBTU	0.004 lb/MMBTU	0.010 lb/MMBTU	(Combined) = U _{NG} x EF _{NG} + U _{FO} x EF _{FO}
		Fuel oil (B)	gallons/day	0.00657 lb/gal	0.00328 lb/gal	0.00197 lb/gal	
20217	Boiler No. 2	31.5 MMBTU/hr Natural gas	(Combined) MMBTU/day	0.0109 lb/MMBTU	0.004 lb/MMBTU	0.010 lb/MMBTU	(Combined) = U _{NG} x EF _{NG} + U _{FO} x EF _{FO}
		Fuel oil (B)	gallons/day	0.00657 lb/gal	0.00328 lb/gal	0.00197 lb/gal	
20218	Boiler No. 3	31.5 MMBTU/hr Natural gas	(Combined) MMBTU/day	0.0109 lb/MMBTU	0.004 lb/MMBTU	0.010 lb/MMBTU	(Combined) = U _{NG} x EF _{NG} + U _{FO} x EF _{FO}
		Fuel oil (B)	gallons/day	0.00657 lb/gal	0.00328 lb/gal	0.00197 lb/gal	
20219	Boiler No. 4	31.5 MMBTU/hr Natural gas	(Combined) MMBTU/day	0.0109 lb/MMBTU	0.004 lb/MMBTU	0.010 lb/MMBTU	(Combined) = U _{NG} x EF _{NG} + U _{FO} x EF _{FO}
		Fuel oil (B)	gallons/day	0.00657 lb/gal	0.00328 lb/gal	0.00197 lb/gal	

- (A) The maximum daily Potential to Emit for the Cooling Towers (calculated with the maximum allowable TDS concentration and maximum allowable daily flowrate) is used for the PM10 emissions.
- (B) Fuel oil emission factors are based on a heat content of 131,400 BTU/gallon (per manufacturer fuel specification).
- (C) Daily gasoline dispensing rate used to calculate the daily ROC emissions shall be based on the average daily gasoline dispensed for the month (total amount of gasoline dispensed in the month divided by the number of days in the month).

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) BOILERS AT CENTRAL PLANT

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

Boiler No. 1

P/O No. 20216 (for reference purposes only - not federally enforceable)
Manufacturer: Johnston Boiler Company
Model: PFTA750-4LG-150S
Serial No. 9357-04
Type: Steam
Heat Input: 31.5 MMBTU/hour
Primary Fuel: Natural gas
Emergency Use Fuel: CARB Diesel No. 2 fuel

Boiler No. 2

P/O No. 20217 (for reference purposes only - not federally enforceable)
Manufacturer: Johnston Boiler Company
Model: PFTA750-4LG-150S
Serial No. 9357-03
Type: Steam
Heat Input: 31.5 MMBTU/hour
Primary Fuel: Natural gas
Emergency Use Fuel: CARB Diesel No. 2 fuel

Boiler No. 3

P/O No. 20218 (for reference purposes only - not federally enforceable)
Manufacturer: Johnston Boiler Company
Model: PFTA750-4LG-150S
Serial No. 9357-02
Type: Steam
Heat Input: 31.5 MMBTU/hour
Primary Fuel: Natural gas
Emergency Use Fuel: CARB Diesel No. 2 fuel

Boiler No. 4

P/O No. 20219 (for reference purposes only - not federally enforceable)
Manufacturer: Johnston Boiler Company
Model: PFTA750-4LG-150S
Serial No. 9357-01
Type: Steam
Heat Input: 31.5 MMBTU/hour
Primary Fuel: Natural gas
Emergency Use Fuel: CARB Diesel No. 2 fuel

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) BOILERS AT CENTRAL PLANT

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this subsection are enforceable by the SMAQMD, U.S. EPA and the public.

EMISSION LIMITS

1. Each boiler, when combusting natural gas fuel, shall not emit:

A. Nitrogen oxides (NOx) in excess of 9 ppmvd, corrected to 3% O₂,

B. Carbon monoxide (CO) in excess of 96.6 ppmvd, corrected to 3% O₂,

excluding startups as defined in Condition No. 8 and shutdowns as defined in SMAQMD Rule 411 Boiler NOx.

[Basis: SMAQMD Rule 202 and 411]

2. Each boiler, when combusting Diesel No. 2 fuel, shall not emit:

A. Nitrogen oxides (NOx) in excess of 40 ppmvd, corrected to 3% O₂,

B. Carbon monoxide (CO) in excess of 400 ppmvd, corrected to 3% O₂,

excluding startups as defined in Condition No. 8 and shutdowns as defined in SMAQMD Rule 411 Boiler NOx.

[Basis: SMAQMD Rule 202] [BACT requirement, not a SMAQMD Rule 411 Section 302 requirement]

3. Emissions from each boiler, when combusting natural gas, shall not exceed the following limits:

[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (lb/MMcf)	Maximum Allowable Emissions for Natural Gas Combustion (B) (lb/day)
ROC	4	3.0
NOx	10.9	8.2
SO ₂	0.6	0.5
PM ₁₀	10	7.6
CO	71.4	54.0

(A) Emission factors for ROC and PM₁₀ are based on manufacturer guarantees. Emission factor for NOx is based on 9 ppmvd at 3% O₂ (SMAQMD Rule 411 limit.) Emission factor for SO₂ is based on U.S. EPA AP-42 Table 1.4-2 (7/1998). Emission factor for CO is based on 96.6 ppmvd at 3% O₂ and is a permittee requested limit.

(B) Daily emissions are based on operating at a maximum capacity (31.5 MMBTU/hr) and 24 hours/day.

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) BOILERS AT CENTRAL PLANT

4. Combined emissions from the following equipment shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Permit to Operate Number	Equipment	Maximum Allowable Combined Emissions (A) (lb/day)		
		NOx	ROC	PM10
12979	Boilers (8), 3.2 MMBTU/hr	150	150	80
17549	Gas turbine and associated cooling towers, 260 MMBTU/hr			
20216	Boiler No. 1, 31.5 MMBTU/hr			
20217	Boiler No. 2, 31.5 MMBTU/hr			
20218	Boiler No. 3, 31.5 MMBTU/hr			
20219	Boiler No. 4, 31.5 MMBTU/hr			
21510	Gasoline dispensing			

(A) Compliance with these emission limitations shall be determined by using the calculation methods specified in Attachment A in the Gas Turbine section of this permit.

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS

5. The boilers shall only be operated simultaneously with the gas turbine when the boilers and gas turbine are combusting natural gas, except for equipment maintenance or emission testing purposes.
[Basis: SMAQMD Rules 201 and 202]
6. The boilers shall combust natural gas fuel as the primary fuel. Diesel No. 2 fuel shall only be used if there is a natural gas curtailment from the commercial gas supply or for equipment maintenance or emission testing purposes.
- A. Each boiler shall not combust Diesel No. 2 fuel for more than 168 hours/year, excluding equipment maintenance and emission testing purposes.
- B. Each boiler shall not combust Diesel No. 2 fuel for more than 48 hours/year for equipment maintenance and emission testing purposes.
[Basis: SMAQMD Rule 411]
7. When combusting Diesel No. 2 fuel, the boilers shall use Diesel No. 2 fuel with a sulfur content no greater than 0.02% by weight (200 ppmw).
[Basis: SMAQMD Rules 201 and 202]
8. A. The startup period of the boiler is defined as the time when fuel is first introduced to the boiler to the time when:
- i. NOx emissions are equal to or less than 9 ppmvd at 3% O2 when combusting natural gas or

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) BOILERS AT CENTRAL PLANT

- ii. NO_x emissions are equal to or less than 40 ppmvd at 3% O₂ when combusting Diesel No. 2 fuel.
- B. The duration of the boiler's startup period shall not exceed 60 minutes.
[Basis: SMAQMD Rules 201 and 202]
- 9. A continuous monitoring system that either measures or calculates the fuel consumption of the boilers (fuel usage of all four boilers combined) shall be operational whenever the boilers are combusting fuel.
[Basis: SMAQMD Rules 201 and 202]
- 10. Each boiler shall be equipped with a non-resetting totalizing hour meter to measure periods when Diesel No. 2 fuel is being combusted.
[Basis: SMAQMD Rules 201 and 202]

EMISSION TESTING REQUIREMENTS

- 11. Emissions of nitrogen oxides, carbon monoxide, and oxygen shall be tested in 2008 and biennially thereafter to verify compliance with Condition No. 1.
 - A. Submit a source test plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed.
 - B. Notify the SMAQMD Air Pollution Control Officer at least 7 days prior to the source test date of the exact date and time of the test if the date has changed from that approved in the source test plan.
 - C. During the source test, the boiler under test shall be operated at a firing rate that is as close as physically possible to the rated capacity.
 - C. Submit the source test report(s) to the SMAQMD Air Pollution Control Officer within 60 days from the completion of the source test(s).
[Basis: SMAQMD Rules 201 and 202]
- 12. Source test methods used shall be those specified in Section 501 of Rule 411, Boiler NO_x.
 - A. Oxides of Nitrogen – ARB Method 100 or EPA Method 7E.
 - B. Carbon Monoxide – ARB Method 100 or EPA Method 10
 - C. Stack Gas Oxygen – ARB Method 100 or EPA Method 3A.
[Basis: SMAQMD Rule 411]

RECORDKEEPING AND REPORTING REQUIREMENTS

- 13. All source test reports shall be continuously maintained on-site for the most recent 5 year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request.

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) BOILERS AT CENTRAL PLANT

14. The following records shall be continuously maintained on-site for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly and yearly records shall be made available for inspection within 30 days following the end of the reporting period.
[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be Recorded
When combusting Diesel No. 2 fuel	A. For each day Diesel No. 2 fuel is combusted: <ul style="list-style-type: none"> i. Date. ii. Identify the boiler that is combusting Diesel No. 2 fuel. iii. Number of hours Diesel No. 2 fuel is combusted. iv. Category of use (maintenance/testing or emergency).
At all times	B. For each shipment of Diesel No. 2 fuel received: <ul style="list-style-type: none"> i. Date ii. Sulfur content
Daily	C. Total amount of natural gas fuel used by all four boilers combined. (MMBTU/hour) D. Total amount of Diesel No. 2 fuel used by all four boilers combined. (MMBTU/hour) E. Date and quantity of the eight "California Special" boilers (P/O 12979) that operated at any time during the day. F. Total ROC, NOx and PM10 daily mass emissions as limited in Condition No. 3 pursuant to the calculation method outlined in Attachment A of the Gas Turbine section of the permit. (pounds/day). <ul style="list-style-type: none"> i. Gas turbine (P/O 17549) and central power plant boiler (P/O 20216, 20217, 20218 and 20219) emissions shall be calculated daily and updated on a monthly basis to include "California Special" boilers (P/O 12979) emissions and average daily gasoline dispensing emissions (P/O 21510).

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) BOILERS AT CENTRAL PLANT

Frequency	Information to be Recorded
Monthly	G. Total amount of gasoline dispensed from the fuel facility (P/O 21510). (gallons/month). H. Daily average amount of gasoline dispensed calculated by the dividing total monthly dispensed amount by the number of days in the month. (average gallons/day)
Yearly	I. Total hours that each boiler combusted Diesel No. 2 fuel during curtailment of natural gas. (hours/year) J. Total hours that each boiler combusted Diesel No. 2 fuel during equipment maintenance or emission testing. (hours/year)

15. A written report shall be submitted to the SMAQMD Air Pollution Control Officer by the dates indicated and shall contain the following information:

[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be included in report
Semiannual: Submitted by the following dates of each year: January 30 July 30	A. Semiannual SO ₂ compliance report to include the following: i. Calendar dates covered in the reporting period. ii. Records of Diesel No. 2 fuel supplier certification of sulfur content. Certification shall include the name of the oil supplier, a statement from the oil supplier that the oil complies with the specifications under the definition of Diesel No. 2 found in 40 CFR 60.41c, and the sulfur content or maximum sulfur content of the oil. iii. Certified statement signed by the owner or operator of the affected facility that the records of Diesel No. 2 fuel supplier certification of sulfur content submitted represent all of the Diesel No. 2 fuel oil combusted during the reporting period.

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) EMERGENCY USE INTERNAL COMBUSTION ENGINES, NOS. 1, 2, 3 AND 4, AT CENTRAL PLANT

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

IC Engine No. 1, Emergency Use

P/O No. 18533 (for reference purposes only - not federally enforceable)
Manufacturer: Caterpillar
Model: 3516B DITA SC 140F
Serial No.: 6HN00135
Horsepower: 2,876 hp at 1,800 rpm
Fuel: Carb Diesel
U.S EPA Family No.: N/A
EPA Tier Standard: Tier 0
Driving: Emergency electrical generator

IC Engine No. 2, Emergency Use

P/O No. 18534 (for reference purposes only - not federally enforceable)
Manufacturer: Caterpillar
Model: 3516B DITA SC 140F
Serial No.: 6HN00136
Horsepower: 2,876 hp at 1,800 rpm
Fuel: Carb Diesel
U.S EPA Family No.: N/A
EPA Tier Standard: Tier 0
Driving: Emergency electrical generator

IC Engine No. 3, Emergency Use

P/O No. 18535 (for reference purposes only - not federally enforceable)
Manufacturer: Caterpillar
Model: 3516B DITA SC 140F
Serial No.: 6HN00137
Horsepower: 2,876 hp at 1,800 rpm
Fuel: Carb Diesel
U.S EPA Family No.: N/A
EPA Tier Standard: Tier 0
Driving: Emergency electrical generator

IC Engine No. 4, Emergency Use

P/O No. 18536 (for reference purposes only - not federally enforceable)
Manufacturer: Caterpillar
Model: 3516B DITA SC 140F
Serial No.: 6HN00134
Horsepower: 2,876 hp at 1,800 rpm

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) EMERGENCY USE INTERNAL COMBUSTION ENGINES, NOS. 1, 2, 3 AND 4, AT CENTRAL PLANT

Fuel: Carb Diesel
 U.S EPA Family No.: N/A
 EPA Tier Standard: Tier 0
 Driving: Emergency electrical generator

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public unless otherwise noted.

EMISSIONS LIMITS

1. Emissions from each IC engine shall not exceed the following limits:

[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (grams/hp-hr)	Maximum Allowable Emissions (C)	
		Daily (lb/day)	Yearly (lb/year)
ROC	0.173	26.3	823
NOx	6.558	997.9	31,185
SO ₂	0.0055 (B)	0.8	26
PM ₁₀	0.145	22.1	690
CO	0.639	97.2	3,039

(A) Emission factors for ROC, NOx, PM₁₀ and CO are based on manufacturer guarantees at full load.

(B) Emission factor for SO₂ is based on a Diesel No. 2 fuel sulfur content of 0.0015% by weight.

(C) Daily and yearly emissions are based on operating at maximum load (2876 hp), 24 hours/day, and 750 hours/year (Refer to Condition No. 2).

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS

2. Each IC engine shall operate only for the following purposes and shall not operate more than the following hours:

[Basis: SMAQMD Rules 201 and 202]

Type of Operational Hours	Maximum Allowable Operation	
	(hours/quarter)	(hours/year)
Maintenance Purposes (A)	50	50
All Operation - Maintenance and Emergency (B)	750	750

(A) Maintenance purposes is defined as: the operation of an IC engine in order to preserve the integrity of the IC engine and its associated generator, the facility's electrical distribution system or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

(B) Emergency is defined as: when electrical service from the serving utility is interrupted by an unforeseeable event.

**V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) EMERGENCY USE INTERNAL
COMBUSTION ENGINES, NOS. 1, 2,
3 AND 4, AT CENTRAL PLANT**

3. The IC engine shall be fueled with:
 - A. CARB diesel fuel, or
 - B. An alternative diesel fuel that is:
 - i. Biodiesel;
 - ii. A biodiesel blend that does not meet the definition of CARB diesel fuel;
 - iii. A Fischer-Tropsch fuel;
 - iv. An emulsion of water in diesel fuel; or
 - C. any alternative diesel fuel that is not identified in Condition 5B above and meets the requirements of the CARB Verification Procedure, or
 - D. an alternative fuel, or
 - E. CARB diesel fuel used with fuel additives that meets the requirements of the Verification Procedure, or
 - F. Any combination of (A) through (E) above.
[Basis: SMAQMD Rules 201 and 202]
4. Each IC engine shall be equipped with a non-resetting hour meter, with a minimum display capability of 9999 hours to ensure compliance with Condition Nos. 1 and No. 2.
[Basis: SMAQMD Rules 201 and 202]
5. Upon request of the SMAQMD Air Pollution Control Officer or designee, once each year, during daylight hours, each IC engine shall be run at maximum anticipated load, from a cold start condition, for observation of compliance with opacity limitations.
[Basis: SMAQMD Rules 201 and 401]

RECORDKEEPING AND REPORTING REQUIREMENTS

6. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records shall be made available within 30 days following the end of the reporting period.
[Basis: SMAQMD Rules 201 and 202]

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) EMERGENCY USE INTERNAL COMBUSTION ENGINES, NOS. 1, 2, 3 AND 4, AT CENTRAL PLANT

Frequency	Information to be recorded for each engine
All fuel deliveries	A. Retain fuel purchase records that account for all fuel purchased for use in each engine. Fuel purchase records shall include: <ul style="list-style-type: none"> i. Identification of type of fuel (e.g. CARB diesel, alternate diesel, etc.) ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.
When IC engine is operated	B. For each IC engine: <ul style="list-style-type: none"> i. Date. ii. Purpose - either maintenance or emergency. iii. Number of hours of operation.
Quarterly	C. Total number of hours of operation of each IC engine for maintenance purposes. (hours/quarter) D. Total number of hours of operation of each IC engine for all purposes. (hours/quarter)
Yearly	E. Total number of hours of operation of each IC engine for maintenance purposes. (hours/year) F. Total number of hours of operation of each IC engine for all purposes. (hours/year)

EMISSION TESTING REQUIREMENTS

No periodic testing requirements

V. EQUIPMENT SPECIFIC REQUIREMENTS – (4) EMERGENCY USE INTERNAL COMBUSTION ENGINES, NOS. 1, 2, 3 AND 4, AT CENTRAL PLANT

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

- 7. If a K-12 school occupies the property at 2850 49th Street, Sacramento, each IC engine shall not be operated for routine maintenance purposes between the hours of 7:30 am and 4:30 pm, Monday through Friday. This restriction does not apply to any operation required by Condition No. 5 or for any emergency operation.

[Basis: ATCM §93115.6(b)(2)]

- 8. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly records shall be made available within 30 days following the end of the reporting period.

[Basis: ATCM §93115.10(g)(1)]

Frequency	Information to be recorded for each engine
Monthly	A. Total number of hours of operation of each IC engine for maintenance purposes. (hours/month) B. Total number of hours of operation of each IC engine for all purposes. (hours/month)

V. EQUIPMENT SPECIFIC REQUIREMENTS – EMERGENCY USE INTERNAL COMBUSTION ENGINE, NO. 5, AT CENTRAL PLANT

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

IC Engine No. 5, Emergency Use

P/O No. 14475 (for reference purposes only - not federally enforceable)
 Manufacturer: Caterpillar
 Model: 3516B DITA SC 140F
 Serial No.: 6HN00361
 Horsepower: 2,876 hp at 1,800 rpm
 Fuel: CARB Diesel
 U.S EPA Family No.: N/A
 EPA Tier Standard: Tier 0
 Driving: Emergency electrical generator

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public unless otherwise noted.

EMISSIONS LIMITS

- Emissions from the IC engine shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (grams/hp-hr)	Maximum Allowable Emissions (B)	
		(lb/quarter)	(lb/year)
ROC	0.132	167	167
NOx	5.465	6,930	6,930
SO ₂	0.0055	7	7
PM10	0.10	132	132
CO	0.355	450	450

(A) Emission factors for ROC, NOx, PM10 and CO are based on manufacturer guarantees at full load. Emission factor for SO₂ is based on 0.0015% sulfur by weight in the fuel.
 (B) Emissions are based on 2876 hp, 200 hours/quarter and 200 hours/year of operation.

V. EQUIPMENT SPECIFIC REQUIREMENTS – EMERGENCY USE INTERNAL COMBUSTION ENGINE, NO. 5, AT CENTRAL PLANT

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENT

2. The IC engine shall operate only for the following purposes and shall not operate more than the following hours:

[Basis: SMAQMD Rules 201 and 202]]

Type of Operational Hours	Maximum Allowable Operation	
	hours/quarter	hours/year
Maintenance Purposes (A)	50	50
All Operation - Maintenance and Emergency (B)	200	200

(A) Maintenance purposes is defined as: the operation of an IC engine in order to preserve the integrity of the IC engine and its associated generator, the facility's electrical distribution system or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

(B) Emergency is defined as: when electrical service from the serving utility is interrupted by an unforeseeable event.

3. The IC engine shall be equipped with a non-resetting hour meter, with a minimum display capability of 999 hours, to ensure compliance with Condition Nos. 1 and No. 2.

[Basis: SMAQMD Rules 201 and 202]

4. Upon request of the SMAQMD Air Pollution Control Officer or designee, once each year, during daylight hours, each IC engine shall be run at maximum anticipated load, from a cold start condition, for observation of compliance with opacity limitations.

[Basis: SMAQMD Rules 201 and 401]

5. The IC engine shall be fueled with:

A. CARB diesel fuel, or

B. An alternative diesel fuel that meets the requirements of the Verification Procedure (as codified in Title 13, California Code of Regulations, Sections 2700-2710), or

C. An alternative fuel, or

D. CARB diesel fuel used with fuel additives that meets the requirements of the Verification Procedure, or

E. Any combination of fuels listed in this condition.

[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – EMERGENCY USE INTERNAL
 COMBUSTION ENGINE, NO. 5, AT
 CENTRAL PLANT**

RECORDKEEPING AND REPORTING REQUIREMENTS

6. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records shall be made available within 30 days following the end of the reporting period.
[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be recorded for each engine
All fuel deliveries	A. Retain fuel purchase records that account for all fuel purchased for use in the engine. Fuel purchase records shall include: <ul style="list-style-type: none"> i. Identification of type of fuel (e.g. CARB diesel, alternate diesel, etc.) ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.
When IC engine is operated	B. For the IC engine: <ul style="list-style-type: none"> i. Date. ii. Purpose - either maintenance or emergency power. iii. Number of hours of operation.
Quarterly	C. Total number of hours of operation of the IC engine for maintenance purposes. (hours/quarter) D. Total number of hours of operation of the IC engine for all purposes. (hours/quarter)
Yearly	E. Total number of hours of operation of the IC engine for maintenance purposes. (hours/year)

**V. EQUIPMENT SPECIFIC REQUIREMENTS – EMERGENCY USE INTERNAL
COMBUSTION ENGINE, NO. 5, AT
CENTRAL PLANT**

Frequency	Information to be recorded for each engine
	F. Total number of hours of operation of the IC engine for all purposes. (hours/year)

EMISSION TESTING REQUIREMENTS

No periodic testing requirements

**V. EQUIPMENT SPECIFIC REQUIREMENTS – EMERGENCY USE INTERNAL
COMBUSTION ENGINE, NO. 5, AT
CENTRAL PLANT**

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

7. The IC engine exhaust stack shall exhaust vertically and at least 42 feet above ground level.
[Basis: SMAQMD Rules 201 and 402]
8. The IC engine exhaust stack shall not have a raincap or any other obstruction that hinders or blocks the exit air velocity.
[Basis: SMAQMD Rules 201 and 402]
9. If a K-12 school occupies the property at 2850 49th Street, Sacramento, each IC engine shall not be operated for routine maintenance purposes between the hours of 7:30 am and 4:30 pm, Monday through Friday. This restriction does not apply to any operation required by Condition No. 5 or for any emergency operation.
[Basis: ATCM §93115.6(b)(2)]
10. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly records shall be made available within 30 days following the end of the reporting period.
[Basis: ATCM §93115.10(g)(1)]

Frequency	Information to be recorded for each engine
Monthly	A. Total number of hours of operation of each IC engine for maintenance purposes. (hours/month) B. Total number of hours of operation of each IC engine for all purposes. (hours/month)

V. EQUIPMENT SPECIFIC REQUIREMENTS – (8) BOILERS - CALIFORNIA SPECIALS

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

(8) Boilers - California Specials (Identical small boilers permitted as one group of boilers)
P/O No. 12979 (for reference purposes only - not federally enforceable)
Manufacturer: Bryan
Model: MOD-400S-100-G
Serial Nos. 52790, 52791, 52797, 52805, 52858, 52859, 52865 and 52868
Type: Hot water
Heat Input: 0.4 MMBTU/hour each
Primary Fuel: Natural gas
Emergency Use Fuel: None

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this subsection are enforceable by the SMAQMD, U.S. EPA and the public.

EMISSION LIMITS

1. The combined emissions from the (8) boilers shall not exceed the following:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) lb/MMcf	Maximum Allowable Emissions (B) lb/quarter
ROC	5.28	37
NOx	100	707
SO ₂	0.6	4
PM ₁₀	12	85
CO	296	2,091

(A) Emission factors for NOx, ROC, SO₂, and PM₁₀ from U.S. EPA AP-42, Table 1.4-1 and 1.4-2 (1/95).
Emission factor for CO corresponds to Rule 411 Boiler NOx limits of 400 ppmvd for CO.

(B) Based on operating all eight boilers at full capacity (3.2 MMBTU/hr total), 24 hours/day, 92 days/quarter.

V. EQUIPMENT SPECIFIC REQUIREMENTS – (8) BOILERS - CALIFORNIA SPECIALS

2. Combined emissions from the following equipment shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Permit to Operate Number	Equipment	Maximum Allowable Combined Emissions (A) lb/day		
		NOx	ROC	PM10
12979	Boilers (8), 3.2 MMBTU/hr	150	150	80
17549	Gas turbine and associated cooling towers, 260 MMBTU/hr			
20216	Boiler No. 1, 31.5 MMBTU/hr			
20217	Boiler No. 2, 31.5 MMBTU/hr			
20218	Boiler No. 3, 31.5 MMBTU/hr			
20219	Boiler No. 4, 31.5 MMBTU/hr			
21510	Gasoline dispensing			

(A) Compliance with these emission limitations shall be determined by using the calculation methods specified in Attachment A in the Gas Turbine section of this permit.

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENT

3. The boilers shall use only natural gas as a fuel.
[Basis: SMAQMD Rules 201 and 202]
4. Combined natural gas usage for the boilers shall not exceed the following limit:

Equipment	Maximum Allowable Fuel Use (A) (cubic feet/quarter)
Boilers	7,065,600

(A) Based on operating each boiler at maximum capacity, 24 hours/day, and 92 days/quarter.

RECORDKEEPING AND REPORTING REQUIREMENTS

5. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Daily records shall be made available the following day.
[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – (8) BOILERS - CALIFORNIA
SPECIALS**

Frequency	Information to be recorded
Daily	A. Date and quantity of the eight "California Special" boilers (P/O 12979) that operated at any time during the day. B. Total ROC, NOx, and PM10 emissions from the boilers as calculated in Attachment A. Emissions shall be calculated daily and updated on a monthly basis.

EMISSION TESTING REQUIREMENTS

No periodic testing requirements

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE - LOT 7
 GENERATOR**

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

Internal Combustion Engine - Emergency Use

P/O No. 22314 (for reference purposes only - not federally enforceable)
 Manufacturer: Cummins
 Model: KTTA19G2
 Serial No.: 37124440
 Horsepower: 750 BHP at 1,800 RPM
 Fuel: CARB Diesel
 U.S EPA Family No.: N/A
 EPA Tier Standard: Tier 0
 Driving: Electrical generator for emergency power.

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public unless otherwise noted.

EMISSIONS LIMITS

- The emissions from the IC engine shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (grams/hp-hr)	Maximum Allowable Emissions (B)	
		(lb/quarter)	(lb/year)
ROC	0.36 (A)	119	119
NOx	11.4 (A)	3770	3770
SO ₂	0.005 (B)	2	2
PM ₁₀	0.12 (A)	40	40
CO	1.26 (A)	417	417

(A) Emission factor for ROC, NOx, PM₁₀, and CO from the manufacturer's Exhaust Emissions Data Sheet, November 1992. SO₂ emission factor is based on 0.0015% sulfur by weight in the fuel.
 (B) Emissions are based on 750 hp, 200 hours/quarter, and 200 hours/year of operation.

V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE EMERGENCY USE - LOT 7 GENERATOR

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS

2. The IC engine shall operate only for the following purposes and shall not operate more than the following hours:

[Basis: SMAQMD Rules 201 and 202]

Type of Operational Hours	Maximum Allowable Operation	
	(hours/quarter)	(hours/year)
Maintenance Purposes (A)	50	50
All Operation - Maintenance and Emergency (B)	200	200

(A) Maintenance purposes is defined as: the operation of an IC engine in order to preserve the integrity of the IC engine and its associated generator, the facility's electrical distribution system or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

(B) Emergency is defined as: when electrical service from the serving utility is interrupted by an unforeseeable event.

3. The IC engine shall be equipped with a non-resetting hour meter, with a minimum display capability of 9999 hours, to ensure compliance with Condition Nos. 1 and No. 2.

[Basis: SMAQMD Rules 201 and 202]

4. Upon request of the SMAQMD Air Pollution Control Officer, once each year, during daylight hours, the IC engine shall be run at maximum anticipated load, from a cold start condition, for observation of compliance with opacity limitations.

[Basis: SMAQMD Rules 201 and 401]

5. The IC engine shall be fueled with:

A. CARB diesel fuel, or

B. An alternative diesel fuel that meets the requirements of the Verification Procedure (as codified in Title 13, California Code of Regulations, Sections 2700-2710), or

C. An alternative fuel, or

D. CARB diesel fuel used with fuel additives that meets the requirements of the Verification Procedure, or

E. Any combination of fuels listed in this condition.

[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE - LOT 7
 GENERATOR**

RECORDKEEPING REQUIREMENTS

6. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records shall be made available within 30 days following the end of the reporting period.
[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be recorded for each engine
All fuel deliveries	A. Retain fuel purchase records that account for all fuel purchased for use in the engine. Fuel purchase records shall include: <ul style="list-style-type: none"> i. Identification of type of fuel (e.g. CARB diesel, alternate diesel, etc.) ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.
When IC engine is operated	B. For the IC engine: <ul style="list-style-type: none"> i. Date. ii. Purpose - either maintenance or emergency. iii. Number of hours of operation.
Quarterly	C. Total number of hours of operation for each operating mode. (hours/quarter)
Yearly	D. Total number of hours of operation for each operating mode. (hours/year)

EMISSION TESTING REQUIREMENTS

No periodic testing requirements

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
EMERGENCY USE - LOT 7
GENERATOR**

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

7. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly records shall be made available within 30 days following the end of the reporting period.

[Basis: ATCM §93115.10(g)(1)]

Frequency	Information to be recorded for each engine
Monthly	A. Total number of hours of operation for each operating mode. (hours/month)

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE - FIRE PUMP
 BUILDING 92**

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

Internal Combustion Engine - Emergency Use

P/O No. 10707 (for reference purposes only - not federally enforceable)
 Manufacturer: Caterpillar
 OEM No.: FM/ULI/3208 DINA
 Serial No.: 90N72000
 Horsepower: 156 BHP at 2,400 RPM
 Fuel: CARB Diesel
 U.S EPA Family No.: N/A
 EPA Tier Standard: Tier 0
 Driving: Water pump for fire fighting.

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public unless otherwise noted.

EMISSIONS LIMITS

- The emissions from the IC Engine shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (grams/hp-hr)	Maximum Allowable Emissions (B)	
		(lb/quarter)	(lb/year)
ROC	1	69	69
NOx	14.0	963	963
SO ₂	0.0049	0.3	0.3
PM ₁₀	1.0	69	69
CO	3.03	208	208

(A) Emission factor for NOx, ROC, PM₁₀, and CO from U.S. EPA AP-42, table 3.3.3-1 (1/75).
 SO₂ emission factor are based on 0.0015% sulfur by weight in the fuel.
 (B) Emissions are based on 156 hp, 200 hours/quarter, and 200 hours/year of operation.

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
EMERGENCY USE - FIRE PUMP
BUILDING 92**

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS

2. The IC engine shall operate only for the following purposes and shall not operate more than the following hours:
[Basis: SMAQMD Rules 201 and 202]

Type of Operational Hours	Maximum Allowable Operation	
	(hours/quarter)	(hours/year)
Maintenance Purposes (A)	40	40
All Operation - Maintenance and Emergency (B)	200	200

(A) Maintenance purposes is defined as: the necessary operation of an IC engine in order to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standards for Inspection, Testing and Maintenance of Water-Based Fire Protection Systems," 2002 edition, or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

(B) Emergency is defined as: when a fire is detected and the fire pump is operated to supply water for fire suppression.

3. The IC engine shall be equipped with a non-resetting hour meter, with a minimum display capability of 999 hours, to ensure compliance with Conditions No. 1 and No. 2.
[Basis: SMAQMD Rules 201 and 202]
4. Upon request of the SMAQMD Air Pollution Control Officer, once each year, during daylight hours, the IC engine shall be run at maximum anticipated load, from a cold start condition, for observation of compliance with opacity limitations.
[Basis: SMAQMD Rules 201 and 401]

5. The IC engine shall be fueled with:

- A. CARB diesel fuel, or
- B. An alternative diesel fuel that meets the requirements of the Verification Procedure (as codified in CCR, Title 13, Sections 2700-2710), or
- C. An alternative fuel, or
- D. CARB diesel fuel used with fuel additives that meets the requirements of the Verification Procedure (as codified in CCR, Title 13, Sections 2700-2710), or
- E. Any combination of fuels listed in this condition.

[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE - FIRE PUMP
 BUILDING 92**

RECORDKEEPING REQUIREMENTS

6. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records shall be made available within 30 days of the end of the reporting period.

[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be recorded
All fuel deliveries	A. Retain fuel purchase records that account for all fuel purchased for use in the engine. Fuel purchase records shall include: <ul style="list-style-type: none"> i. Identification of type of fuel (e.g. CARB diesel, alternate diesel, etc.). ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.
When IC engine is operated	B. For the IC engine: <ul style="list-style-type: none"> i. Date. ii. Purpose - either maintenance or emergency power. iii. Number of hours of operation.
Quarterly	C. Total number of hours of operation of the IC engine for maintenance purposes. (hours/quarter) D. Total number of hours of operation of the IC engine for all purposes. (hours/quarter)
Yearly	E. Total number of hours of operation of the IC engine for maintenance purposes. (hours/year) F. Total number of hours of operation of the IC engine for all purposes. (hours/year)

EMISSION TESTING REQUIREMENTS

No periodic testing requirements

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
EMERGENCY USE - FIRE PUMP
BUILDING 92**

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

7. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly records shall be made available within 30 days following the end of the reporting period.

[Basis: ATCM §93115.10(g)(1)]

Frequency	Information to be recorded for each engine
Monthly	A. Total number of hours of operation of the IC engine for maintenance purposes. (hours/month) B. Total number of hours of operation of the IC engine for all purposes. (hours/month)

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE – PORTABLE
 890 HP**

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public unless otherwise noted.

The requirements specified under the following sections apply to the following equipment:

Internal Combustion Engine - Emergency Use

P/O No. 11494 (for reference purposes only - not federally enforceable)
 Manufacturer: Caterpillar
 Model: 3412
 Serial No.: 81Z08979
 Horsepower: 890 BHP at 1,800 RPM
 Fuel: CARB Diesel
 U.S EPA Family No.: N/A
 EPA Tier Standard: Tier 0
 Driving: Electrical generator for emergency power.

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public.

EMISSIONS LIMITS

- The emissions from the IC Engine shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (grams/hp-hr)	Maximum Allowable Emissions (B)	
		(lb/quarter)	(lb/year)
ROC	0.9	360	360
NOx	11.47	4501	4501
SO ₂	0.0055	2	2
PM ₁₀	0.82	322	322
CO	2.5	981	981

(A) Emission factors for ROC, NOx, PM10 and CO (lb/1000 gallons) from U.S. EPA AP-42, Tables 3.3.3-1 (1/75). SO₂ emission factor is based on 0.0015% sulfur by weight in the fuel.
 (B) Emissions are based on 890 hp, 200 hours/quarter, and 200 hours/year of operation.

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE – PORTABLE
 890 HP**

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS:

2. The IC engine shall operate only for the following purposes and shall not operate more than the following hours:

[Basis: SMAQMD Rules 201 and 202]

Type of Operational Hours	Maximum Allowable Operation	
	(hours/quarter)	(hours/year)
Maintenance Purposes (A)	40	40
All Operation - Maintenance and Emergency (B)	200	200

(A) Maintenance purposes is defined as: the operation of an IC engine in order to preserve the integrity of the IC engine and its associated generator, the facility's electrical distribution system or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

(B) Emergency is defined as: when electrical service from the serving utility is interrupted by an unforeseeable event.

3. The IC engine shall be equipped with a non-resetting hour meter, with a minimum display capability of 999 hours, to ensure compliance with Condition Nos. 1 and No. 2.

[Basis: SMAQMD Rules 201 and 202]

4. Upon request of the SMAQMD Air Pollution Control Officer, once each year during daylight hours, the IC Engine shall be run at maximum anticipated load, from a cold start condition, for observation of compliance with opacity limitations.

[Basis: SMAQMD Rules 201 and 401]

5. The IC engine shall be fueled with:

- A. CARB diesel fuel, or
- B. An alternative diesel fuel that meets the requirements of the Verification Procedure (as codified in Title 13, California Code of Regulations, Sections 2700-2710), or
- C. An alternative fuel, or
- D. CARB diesel fuel used with fuel additives that meets the requirements of the Verification Procedure, or
- E. Any combination of fuels listed in this condition.

[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE – PORTABLE
 890 HP**

RECORDKEEPING REQUIREMENTS

6. The following record shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records shall be made available within 30 days following the end of the reporting period.

[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be recorded for each engine
All fuel deliveries	A. Retain fuel purchase records that account for all fuel purchased for use in the engine. Fuel purchase records shall include: <ul style="list-style-type: none"> i. Identification of type of fuel (e.g. CARB diesel, alternate diesel, etc.) ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.
When IC engine is operated	B. For the IC engine: <ul style="list-style-type: none"> i. Date. ii. Purpose - either maintenance or emergency power. iii. Number of hours of operation.
Quarterly	C. Total number of hours of operation of the IC engine for maintenance purposes. (hours/quarter) D. Total number of hours of operation of the IC engine for all purposes. (hours/quarter)
Yearly	E. Total number of hours of operation of the IC engine for maintenance purposes. (hours/year) F. Total number of hours of operation of the IC engine for all purposes. (hours/year)

EMISSION TESTING REQUIREMENTS

No periodic testing requirements.

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE – PORTABLE
 890 HP**

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

7. The IC engine shall operate only for the following purposes and shall not operate more than the following hours:

[Basis: SMAQMD Rules 201, 202, and ATCM §93115.6(b)]

Type of Operational Hours	Maximum Allowable Operation	
	(hours/quarter)	(hours/year)
Maintenance Purposes (A)	40	40

(A) Maintenance purposes is defined as: the operation of an IC engine in order to preserve the integrity of the IC engine and its associated generator, the facility's electrical distribution system or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

8. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly records shall be made available within 30 days following the end of the reporting period.

[Basis: SMAQMD Rules 201, 202, and ATCM §93115.10(g)(1)]

Frequency	Information to be recorded for each engine
Monthly	A. Total number of hours of operation of each IC engine for maintenance purposes. (hours/month) B. Total number of hours of operation of each IC engine for all purposes. (hours/month)

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE – PORTABLE 68
 HP**

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

Internal Combustion Engine - Emergency Use

P/O No. 13421 (for reference purposes only - not federally enforceable)
 Manufacturer: Cummins
 Model: 4B3.9-G
 Serial No.: 44982109
 Horsepower: 68 BHP
 Fuel: CARB Diesel
 U.S EPA Family No.: N/A
 EPA Tier Standard: Tier 0
 Driving: Electrical generator for emergency power.

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public unless otherwise noted.

EMISSIONS LIMITS

- The emissions from the IC Engine shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (grams/hp-hr)	Maximum Allowable Emissions (B)	
		(lb/quarter)	(lb/year)
ROC	0.57	17	17
NOx	9.23	277	277
SO ₂	0.0049	0.1	0.1
PM ₁₀	0.25	7	7
CO	6.59	198	198

(A) Emission factors for ROC, NOx, PM10 and CO are from manufacturer's data. SO₂ emission factor is based on 0.0015% sulfur by weight in the fuel.

(B) Emissions are based on 68 hp, 200 hours/quarter, and 200 hours/year of operation.

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE – PORTABLE 68
 HP**

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS

2. The IC engine shall operate only for the following purposes and shall not operate more than the following hours:

[Basis: SMAQMD Rules 201 and 202]

Type of Operational Hours	Maximum Allowable Operation	
	(hours/quarter)	(hours/year)
Maintenance Purposes (A)	40	40
All Operation - Maintenance and Emergency (B)	200	200

(A) Maintenance purposes is defined as: the operation of an IC engine in order to preserve the integrity of the IC engine and its associated generator, the facility's electrical distribution system or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

(B) Emergency is defined as: when electrical service from the serving utility is interrupted by an unforeseeable event.

3. The IC engine shall be equipped with a non-resetting hour meter, with a minimum display capability of 999 hours, to ensure compliance with Condition Nos. 1 and No. 2.

[Basis: SMAQMD Rules 201 and 202]

4. Upon request of the SMAQMD Air Pollution Control Officer, once each year, during daylight hours, the IC Engine shall be run at maximum anticipated load, from a cold start condition, for observation of compliance with opacity limitations.

[Basis: SMAQMD Rules 201 and 401]

5. The IC engine shall be fueled with:

- A. CARB diesel fuel, or
- B. An alternative diesel fuel that meets the requirements of the Verification Procedure (as codified in Title 13, California Code of Regulations, Sections 2700-2710), or
- C. An alternative fuel, or
- D. CARB diesel fuel used with fuel additives that meets the requirements of the Verification Procedure, or
- E. Any combination of fuels listed in this condition.

[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE – PORTABLE 68
 HP**

RECORDKEEPING REQUIREMENTS

6. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records shall be made available within 30 days following the end of the reporting period.

[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be recorded for each engine
All fuel deliveries	A. Retain fuel purchase records that account for all fuel purchased for use in the engine. Fuel purchase records shall include: <ul style="list-style-type: none"> i. Identification of type of fuel (e.g. CARB diesel, alternate diesel, etc.) ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.
When IC engine is operated	B. For the IC engine: <ul style="list-style-type: none"> i. Date. ii. Purpose - either maintenance or emergency power. iii. Number of hours of operation.
Quarterly	C. Total number of hours of operation of the IC engine for maintenance purposes. (hours/quarter) D. Total number of hours of operation of the IC engine for all purposes. (hours/quarter)
Yearly	E. Total number of hours of operation of the IC engine for maintenance purposes. (hours/year) F. Total number of hours of operation of the IC engine for all purposes. (hours/year)

EMISSION TESTING REQUIREMENTS

No periodic testing requirements

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
EMERGENCY USE – PORTABLE 68
HP**

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

7. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly records shall be made available within 30 days following the end of the reporting period.

[Basis: ATCM §93115.10(g)(1)]

Frequency	Information to be recorded for each engine
Monthly	A. Total number of hours of operation of each IC engine for maintenance purposes. (hours/month) B. Total number of hours of operation of each IC engine for all purposes. (hours/month)

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE (PET TRAILER)**

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

Internal Combustion Engine - Emergency Use

P/O No. 19775 (for reference purposes only - not federally enforceable)
 Manufacturer: John Deere
 Model: 4045H275H
 Serial No.: PE4045H378606
 Horsepower: 157 BHP at 1800 RPM
 Fuel: CARB Diesel
 U.S EPA Family No.: 4JDXL06.8039
 EPA Tier Standard: Tier 2
 Driving: Electrical generator for emergency power.

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public unless otherwise noted.

EMISSIONS LIMITS

- The emissions from the IC Engine shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (grams/hp-hr)	Maximum Allowable Emissions (B)	
		(lb/quarter)	(lb/year)
ROC	1.0	69	69
NOx	4.9	339	339
NMHC+NOx	4.9	N/A	N/A
SO2	0.0049	0.3	0.3
PM10	0.15	10	10
CO	3.7	256	256

(A) Emission factors for NMHC+NOx, PM10, and CO are based on SMAQMD BACT limits (EPA Tier 2, non-road standards.) Emission factor for NOx is based on the NMHC+NOx factor with the NMHC portion credited as NOx. Emission factor for ROC is an uncontrolled value from AP-42, Table 3.3-1 (10/96.) Emission factor for SO2 is based of 15 ppm sulfur content by weight in the fuel.
 (B) Emissions are based on 157 bhp, 200 hours/quarter, 200 hours/year, and the emission factors in this table.

V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE EMERGENCY USE (PET TRAILER)

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS

2. The IC engine shall operate only for the following purposes and shall not operate more than the following hours:

[Basis: SMAQMD Rules 201 and 202]

Type of Operational Hours	Maximum Allowable Operation	
	(hours/quarter)	(hours/year)
Maintenance Purposes (A)	50	50
All Operation - Maintenance and Emergency (B)	200	200

(A) Maintenance purposes is defined as the operation of an IC engine in order to preserve the integrity of the IC engine and its associated generator, the facility's electrical distribution system, or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

(B) Emergency is defined as an occurrence when electrical service from the serving utility is interrupted by an unforeseeable event.

3. The IC engine shall be equipped with a non-resetting hour meter with a minimum display capability of 9999 hours, to ensure compliance with Condition Nos. 1 and No. 2.

[Basis: SMAQMD Rules 201 and 202]

4. Upon request of the SMAQMD Air Pollution Control Officer, once each year during daylight hours, the IC Engine shall be run at maximum anticipated load from a cold start condition for observation of compliance with opacity limitations.

[Basis: SMAQMD Rules 201 and 401]

5. The IC engine shall be fueled with:

- A. CARB diesel fuel, or
- B. An alternative diesel fuel that meets the requirements of the Verification Procedure (as codified in Title 13, California Code of Regulations, Sections 2700-2710), or
- C. An alternative fuel, or
- D. CARB diesel fuel used with fuel additives that meets the requirements of the Verification Procedure, or
- E. Any combination of fuels listed in this condition.

[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE (PET TRAILER)**

RECORDKEEPING REQUIREMENTS

6. The following record shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records shall be made available within 30 days following the end of the reporting period.

[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be recorded for each engine
All fuel deliveries	A. Retain fuel purchase records that account for all fuel purchased for use in the engine. Fuel purchase records shall include: <ul style="list-style-type: none"> i. Identification of type of fuel (e.g. CARB diesel, alternate diesel, etc.) ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.
When IC engine is operated	B. For the IC engine: <ul style="list-style-type: none"> i. Date. ii. Purpose - either maintenance or emergency. iii. Number of hours of operation.
Quarterly	C. Total number of hours of operation of the IC engine for maintenance purposes. (hours/quarter) D. Total number of hours of operation of the IC engine for all purposes. (hours/quarter)
Yearly	E. Total number of hours of operation of the IC engine for maintenance purposes. (hours/year) F. Total number of hours of operation of the IC engine for all purposes. (hours/year)

EMISSION TESTING REQUIREMENTS

No periodic testing requirements

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
EMERGENCY USE (PET TRAILER)**

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

7. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly records shall be made available within 30 days following the end of the reporting period.

[Basis: ATCM §93115.10(g)(1)]

Frequency	Information to be recorded for each engine
Monthly	A. Total number of hours of operation of each IC engine for maintenance purposes. (hours/month) B. Total number of hours of operation of each IC engine for all purposes. (hours/month)

8. The exhaust stack of the IC engine shall exit vertically and shall not be obstructed during engine operation. A flapper-type rain cap will comply with this condition provided it does not impede the vertical flow of exhaust.

[Basis: SMAQMD Rules 201 and 402]

V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE EMERGENCY USE (BLDG. 34)

A. EQUIPMENT DESCRIPTION: The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

Internal Combustion Engine - Emergency Use

P/O No. 22060 (for reference purposes only - not federally enforceable)
 Manufacturer: Caterpillar
 Model: C32
 Serial No.: SYC02850
 Horsepower: 1502 BHP at 1800 RPM
 Fuel: CARB Diesel
 U.S EPA Family No.: 8CPXL32.0ESW
 EPA Tier Standard: Tier 2
 Driving: Electrical generator for emergency power.

B. EQUIPMENT SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public unless otherwise noted.

EMISSIONS LIMITS

1. The emissions from the IC Engine shall not exceed the following limits:
[Basis: SMAQMD Rules 201 and 202]

Pollutant	Emission Factor (A) (grams/hp-hr)	Maximum Allowable Emissions (B)	
		(lb/quarter)	(lb/year)
ROC	0.29	192	192
NOx	4.8	3179	3179
ROC+NOx	4.8	N/A	N/A
SO ₂	0.005	3.3	3.3
PM10	0.15	99	99
CO	2.6	1722	1722

(A) Emission factors for NMHC+NOx, PM10, and CO are based on U.S. EPA Tier 2, non-road standards for a 1502 hp IC engine for model year 2008. Emission factor for NOx is based on the NMHC+NOx factor with the NMHC portion credited as NOx. Emission factor for ROC is an uncontrolled value from AP-42, Table 3.3-1 (10/96.) Emission factor for SO₂ is based of 15 ppm sulfur content by weight in the fuel.
 (B) Emissions are based on 1502 bhp, 24 hours/day, 200 hours/quarter, 200 hours/year, and the emission factors in this table.

V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE EMERGENCY USE (BLDG. 34)

EQUIPMENT DESIGN, OPERATION AND MONITORING REQUIREMENTS

2. The IC engine shall operate only for the following purposes and shall not operate more than the following hours:

[Basis: SMAQMD Rules 201 and 202]

Type of Operational Hours	Maximum Allowable Operation	
	(hours/quarter)	(hours/year)
Maintenance Purposes (A)	50	50
All Operation - Maintenance and Emergency (B)	200	200

(A) Maintenance purposes is defined as the operation of an IC engine in order to preserve the integrity of the IC engine and its associated generator, the facility's electrical distribution system, or when required by the SMAQMD to verify compliance with the applicable rules and regulations.

(B) Emergency is defined as an occurrence when electrical service from the serving utility is interrupted by an unforeseeable event.

3. The IC engine shall be equipped with a non-resetting hour meter with a minimum display capability of 9999 hours, to ensure compliance with Condition Nos. 1 and No. 2.

[Basis: SMAQMD Rules 201 and 202]

4. Upon request of the SMAQMD Air Pollution Control Officer, once each year during daylight hours, the IC Engine shall be run at maximum anticipated load from a cold start condition for observation of compliance with opacity limitations.

[Basis: SMAQMD Rules 201 and 401]

5. The IC engine shall be fueled with:

A. CARB diesel fuel, or

B. An alternative diesel fuel that is:

i. Biodiesel;

ii. A biodiesel blend that does not meet the definition of CARB diesel fuel;

iii. A Fischer-Tropsch fuel;

iv. An emulsion of water in diesel fuel; or

C. any alternative diesel fuel that is not identified in Condition 5B above and meets the requirements of the CARB Verification Procedure, or

D. an alternative fuel, or

E. CARB diesel fuel used with fuel additives that meets the requirements of the Verification Procedure, or

F. Any combination of (A) through (E) above.

[Basis: SMAQMD Rules 201 and 202]

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
 EMERGENCY USE (BLDG. 34)**

RECORDKEEPING REQUIREMENTS

6. The following record shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records shall be made available within 30 days following the end of the reporting period.

[Basis: SMAQMD Rules 201 and 202]

Frequency	Information to be recorded for each engine
All fuel deliveries	A. Retain fuel purchase records that account for all fuel purchased for use in the engine. Fuel purchase records shall include: <ul style="list-style-type: none"> i. Identification of type of fuel (e.g. CARB diesel, alternate diesel, etc.) ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.
When IC engine is operated	B. For the IC engine: <ul style="list-style-type: none"> i. Date. ii. Purpose - either maintenance or emergency. iii. Number of hours of operation.
Quarterly	C. Total number of hours of operation of the IC engine for maintenance purposes. (hours/quarter) D. Total number of hours of operation of the IC engine for all purposes. (hours/quarter)
Yearly	E. Total number of hours of operation of the IC engine for maintenance purposes. (hours/year) F. Total number of hours of operation of the IC engine for all purposes. (hours/year)

EMISSION TESTING REQUIREMENTS

No periodic testing requirements

**V. EQUIPMENT SPECIFIC REQUIREMENTS – INTERNAL COMBUSTION ENGINE
EMERGENCY USE (BLDG. 34)**

C. EQUIPMENT SPECIFIC NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the SMAQMD.

7. The following records shall be continuously maintained onsite for the most recent five year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Monthly records shall be made available within 30 days following the end of the reporting period.

[Basis: ATCM §93115.10(g)(1)]

Frequency	Information to be recorded for each engine
Monthly	A. Total number of hours of operation of each IC engine for maintenance purposes. (hours/month) B. Total number of hours of operation of each IC engine for all purposes. (hours/month)