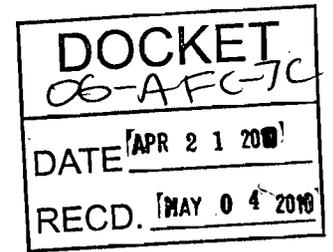


CALIFORNIA ENERGY COMMISSION1516 NINTH STREET
SACRAMENTO, CA 95814-5512

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**



In the Matter of:)	Docket No. 06-AFC-7C
HUMBOLDT BAY GENERATING STATION)	
)	Order No. 10-0421-3
PACIFIC GAS AND ELECTRIC COMPANY)	ORDER APPROVING PETITION TO MODIFY AIR QUALITY AND PUBLIC HEALTH CONDITIONS OF CERTIFICATION

On April 30, 2009 Pacific Gas and Electric, the owner/operator of the Humboldt Bay Generating Station project, submitted a petition requesting to modify air quality and public health conditions of certification. The modifications will allow Energy Commission conditions to match modifications made by the North Coast Unified Air Quality Management District to the conditions in the permits it issued for the project.

The modifications were approved by the North Coast Unified Air Quality Management District and a revised Authority to Construct/Temporary Permit to Operate was issued on December 2, 2009. The Title V Permit to Operate the facility when it begins commercial operation, scheduled for September 2010, was released for EPA comment on December 18, 2009. The U.S. EPA review ended with the significant modification to the Title V permit dated February 8, 2010.

STAFF RECOMMENDATION

Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of the Pacific Gas and Electric petition to amend conditions of certification for the Humboldt Bay Generating Station project.

ENERGY COMMISSION FINDINGS

Based on staff's analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- The petition meets all the filing criteria of Title 20, section 1769(a)(1) of the California Code of Regulations concerning post-certification project modifications;
- The modification will not change the findings in the Energy Commission's Final Decision pursuant to Title 20, section 1755;

- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;
- The changes will benefit the project owner by improving the consistency and clarity of air quality compliance requirements and revising the means of demonstrating compliance so that the power plant can be operated more flexibly, and;
- The change is based on information that was not available to the parties prior to Commission certification because Wärtsilä, the manufacturer of the generating equipment, made more detailed information available to PG&E on engine performance as plans, engineering, construction, operation, and compliance schedules and procedures were developed for the facility.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendations and approves the following changes to the Commission Decision for the Humboldt Bay Generating Station project. New language is shown as **bold and underlined**, and deleted language is shown in ~~strikeout~~.

CONDITIONS OF CERTIFICATION

FEDERALLY ENFORCEABLE GENERAL REQUIREMENTS

TITLE V PERMIT MODIFICATIONS AND RENEWAL

AQ-1 The permittee shall submit to the Air Pollution Control Officer (APCO) a completed Title V permit application for renewal no earlier than September 17, 2011 (18 months prior to the expiration date of the Title V permit) and no later than September 17, 2012 (6 months prior to the expiration date of the Title V permit). ~~[District Rule 502 §2.2; 40 CFR 70.5(a)(1)(iii)]~~ This ~~The Authority to Construct~~ permit shall serve as the Prevention of Significant Deterioration preconstruction permit for the sources identified herein, and is issued pursuant to 40 Code of Federal Regulations (C.F.R.), Part 70 and Regulation V of the Rules and Regulations of the North Coast Unified Air Quality Management District. ~~[NCUAQMD Reg 5 Rule 405(b)] [NCUAQMD Reg V Rule 502 § 2.2 (5/19/05)] [40 C.F.R. 70.5(a)(1)(iii).]~~

Verification: No verification needed.

~~AQ-2~~ ~~This permit shall be valid for a period not to exceed 545 days from the date of issuance. Upon completion of the construction and the commissioning phase for the internal reciprocating engines, the Permittee shall submit a Title V Permit to Operate application to the Air Pollution Control Officer.~~ ~~[NCUAQMD Reg 5 Rule 405(b)] [NCUAQMD Reg V Rule 502 § 2.23 (5/19/05)] [40 C.F.R. 70.5(a)(1)(iii).]~~

Verification: ~~The project owner shall submit to both the district and CPM the Title V Permit to operate application upon completion of commissioning.~~

AQ-23 If modifications to the permit are necessary, the permittee ~~of the Title V source permitted herein~~ shall submit to the Air Pollution Control Officer a complete Title V permit application for **either** an Administrative, Minor, or Significant Title V permit modification. The application shall not be submitted prior to receiving any required preconstruction permit from the NCUAQMD. [NCUAQMD **Rule 102-Reg 5 Rule 405(e)**] [NCUAQMD Reg V Rule 502 §2.3-(5/19/05)] [40 C.F.R. 70.5(a)(1)(ii).]

Verification: The project owner shall submit to both the district and CPM the Title V modification application after receiving applicable preconstruction permit(s).

AQ-3 The permittee shall submit to the Air Pollution Control Officer timely updates to the Title V application as new requirements become applicable to the source, and in no event less than quarterly (i.e., every three months). [40 CFR 70.5(b)]

~~AQ-4~~ The Permittee shall submit to the Air Pollution Control Officer timely updates to the Title V application as new requirements become applicable to the source and in no event less than quarterly (i.e., every three months). [40 C.F.R. 70.5(b).]

Verification: The project owner shall submit to both the district and CPM the Title V application updates as needed.

AQ-45 The permittee ~~A Permittee's responsible official~~ shall promptly provide additional information in writing to the APCO upon discovery of the submittal of any inaccurate information as part of the application or as a supplement thereto; or of any additional relevant facts previously omitted which are needed for accurate analysis of the application; and including inaccurate information known, or which should have been known or should be known, by the permittee(s). [NCUAQMD **Rule 103 Section 6.0** Reg 5 Rule 420(e)] [NCUAQMD Reg V Rule 502 §§ 5.1, 5.3, 5.4 (5/19/05)] [40 C.F.R. 70.5(a)(2) and (b).]

Verification: The project owner shall submit to both the district and CPM the ~~Title V~~ information as needed.

AQ-56 Upon written request of the Air Pollution Control Officer, the permittee's ~~responsible official~~ shall supplement any complete application with additional information within the time frame specified by the APCO. [NCUAQMD **Rule 103 Section 6.0-Reg 5 Rule 420(b)**] [NCUAQMD Reg V Rule 502 § 5.2 (5/19/05)] [40 C.F.R. 70.5(a)(2) and (b).]

Verification: The project owner shall submit to both the district and CPM the ~~Title V~~ additional information as needed.

AQ-6 Prior to first operation of the equipment authorized pursuant to this permit, the permittee shall possess a valid Title V Permit to Operate for the engines. [NCUAQMD Regulation V Rule 501]

Verification: The project owner shall make the site available for inspection by representatives of the district, California Air Resources Board (ARB), and Commission upon request.

~~AQ-7~~ PSD preconstruction permit expiration terminates the Permittee's right to operate the stationary sources itemized in this permit unless a timely and complete Title V permit application has been submitted, in which case the existing PSD preconstruction permit will remain in effect until the Title V permit has been issued or denied. In order to be considered timely, a complete Title V permit application must be submitted prior to the expiration of the PSD preconstruction permit. [NCUAQMD Reg 5 Rule 400(b)(c) and (d)] [NCUAQMD Reg V Rule 502 § 1.2, 1.3, and 1.4] [40 C.F.R. 70.7(b) and (e)(2)(v).]

Verification: The project owner shall submit to both the District and CPM the Title V application prior to expiration of the applicable PSD preconstruction permit.

~~AQ-8~~ When submitting an application for a permit pursuant to Regulation 5, the Permittee's responsible official shall include the following information: A certification by a responsible official of all reports and other documents submitted for permit application; compliance progress reports at least every 6 months for, and submitted no later than 30 days after, the periods January 1 through June 30 and July 1 through December 31 of each year; statements on compliance status with any applicable enhanced monitoring; and annual compliance plans, no later than January 30 of each year, which shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. [NCUAQMD Reg 5 Rule 415(m)] [NCUAQMD Reg V Rule 502 § 4.13 (5/19/05)] [40 C.F.R. 70.5(e)(9) and (d).]

Verification: The project owner shall submit to both the District and CPM the Title V application as needed.

~~AQ-9~~ With the exception of acid rain units subject to Title IV of the Clean Air Act and solid waste incinerators subject to section 129(e) of the Clean Air Act, each permit issued pursuant to NCUAQMD Regulation 5 to operate for any source shall include a condition for a fixed term not to exceed five years from the time of issuance. A permit to operate for an acid rain unit shall have a fixed permit term of five years. A permit to operate for a solid waste incinerator shall have a permit term of 12 years; however, the permit shall be reviewed at least every 5 years. [NCUAQMD Reg 5 Rule 660] [NCUAQMD Reg V Rule 504 § 11 (5/19/05)] [40 C.F.R. 70.6(a)(2).]

Verification: No verification needed.

COMPLIANCE

~~AQ-710~~ The permittee shall comply with all conditions of the Title V permit. [NCUAQMD **Rule 105** Reg 5 Rule 610(g)(1)] [NCUAQMD Reg V Rule 504 §2.7.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

~~AQ-11~~ Compliance with the conditions of this Title V permit shall be deemed in compliance with all applicable requirements identified in the Title V permit. [40 C.F.R. 70.6(f).]

Verification: No verification needed.

~~AQ-12~~ The Permittee may not assert or use as a defense, expressly, impliedly, or by operation of law or past practice, in any enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Title V permit. [NCUAQMD Reg 5 Rule 610(g) (4)] [NCUAQMD Reg V Rule 504 § 2.7.4 (5/19/05).]

~~**Verification:**~~ No verification needed.

~~AQ-813~~ This Title V permit may be modified, revoked, reopened, and reissued or terminated for cause. [NCUAQMD Reg I Rule 102 Reg 5 Rule 570(a) and (b)] [NCUAQMD Reg 5 Rule 503 § 9 (5/19/05).]

~~**Verification:**~~ No verification needed.

~~AQ-914~~ The permittee shall furnish to the APCO, within 10 (ten) days of the request, any information that the APCO may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with this **Authority to Construct/PSD Title V** permit. Upon request, the permittee shall also furnish to the APCO copies of records required to be kept by conditions of this permit. For information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. [**District Rule 103 Section 6** 40 C.F.R. 70.6(a)(6)(v).]

~~**Verification:**~~ The project owner shall submit to both the district and CPM the Title V permit compliance information within ten days of request by the APCO.

~~AQ-1015~~ 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. [NCUAQMD **Rule 102 Section 9** Reg 5 Rule 610(g) (3)] [NCUAQMD Reg 5 Rule 504 § 2.7.3 (5/19/05).]

~~**Verification:**~~ No verification needed.

~~AQ-1116~~ A pending Title V permit action (e.g. a proposed permit revision) or notification of anticipated noncompliance does not stay any permit condition. [NCUAQMD **Rule 102 Section 5.0** Reg 5 Rule 610(g) (5)] [NCUAQMD Reg 5 Rule 504 § 2.7.5 (5/19/05).]

~~**Verification:**~~ No verification needed.

~~AQ-1217~~ This **Authority to Construct/PSD Title V** permit does not convey any property rights of any sort or any exclusive privilege. [NCUAQMD **Rule 102 Section 5.0** Reg 5 Rule 610(g) (2)] [NCUAQMD Reg V Rule 504 § 2.7.2 (5/19/05).]

~~**Verification:**~~ No verification needed.

- AQ-1318** Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the APCO 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 Authority to Construct/PSD 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 Authority to Construct/PSD 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 ensuring compliance with the Authority to Construct/PSD Title V permit conditions or applicable federal requirements. [NCUAQMD Rule 109 and Rule 504 § 2.5 Reg 5 Rule 610(e)] [~~NCUAQMD Reg V Rule 504 § 2.5 (5/19/05).~~]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

REPORTS AND RECORDKEEPING

AQ-1419 Monitoring Reports

- A. The permittee shall submit to the APCO at least once every six months, unless required more frequently by an applicable requirement, reports of all required monitoring set out in this Authority to Construct/PSD Title V permit.
- B. The reporting periods for this permit shall be for the six month periods January 1 through June 30 and July 1 through December 31. The reports shall be submitted by July 30 and March 1 ~~January 30~~ of each year respectively.
- C. Any and all instances of deviations from Title V permit conditions must be clearly identified in such reports. 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. [NCUAQMD Rule 103 Section 6 Reg 5 Rules 460 and 625] [~~NCUAQMD Reg V Rule 502 §11 and Rule 504 §5 and (5/19/05)~~] [40 C.F.R. 70.6(a)(3)(ii) and (iii).]

Verification: The project owner shall submit to the CPM and APCO the semi-annual operational reports that include monitoring results (**AQ-SC9**).

AQ-1520 Compliance Reports

- A. The permittee shall submit to the APCO and to U.S. EPA (Air-3, U.S. EPA, Region IX) on an annual basis, unless required more frequently by additional

applicable federal requirements, a certification of compliance by the permittee's ~~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 1 through December 31. The report shall be submitted by January 30 of each year. The initial report shall be for the period January 1 2009 through December 31, 2009 and shall be submitted by March 1, 2010.
- 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 shall include the following:
1. The identification of each term or condition of the **Authority to Construct/PSD** ~~Title V~~ permit that is the basis of the certification.
 2. 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.
 3. The status of compliance with the terms and conditions of the **Authority to Construct/PSD** ~~Title V~~ permit for the period covered by the certification, based on the method designated in Section D (2) of this condition.
 4. Such other facts as the APCO may require in order to determine the compliance status of the source.
 5. A method for monitoring the compliance of the stationary source with its emissions limitations, standards, and work practices. [NCUAQMD **Rule 102 Section 5.0 Reg 5 Rule 650**] [NCUAQMD-Reg-V-Rule 504 § 10-(5/19/05)] [40 C.F.R. 70.6(b)(5).]

Verification: The project owner shall submit to the CPM and APCO the annual operational reports that include compliance results (AQ-SC9).

AQ-1621 The permittee shall report within 24 hours of detection any deviation from a federally enforceable **Authority to Construct/PSD** ~~Title V~~ permit condition not attributable to an emergency. In order to fulfill the reporting requirement of this condition, the permittee shall notify the APCO by telephone followed by a written statement describing the nature of the deviation from the federally enforceable permit condition. [NCUAQMD **Rule 102 Section 5.0 Reg 5 Rule 625**] [NCUAQMD-Reg-V-Rule 504 Section 5-(5/19/05)]-[40 C.F.R. 70.6(a)(3)(iii)]

Verification: The project owner shall submit to both the district and CPM the notification within 24 hours after determining any deviation from a federally enforceable ~~Title V~~ permit condition.

AQ-1722 All monitoring data and support information required by a federally enforceable applicable requirement must be kept by the stationary source 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 requirement in the **Authority to Construct/PSD Title V** permit. [NCUAQMD **Rule 102 Section 5.0** Reg. 5 Rules 455 and 615] [NCUAQMD Reg. V Rule 502 Section 10 and Rule 504 Section 3 (5/19/05)] [40 C.F.R. 70.6(a)(3)(ii)]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

PUBLIC NUISANCE

AQ-1823 The permittee(s) shall not discharge such quantities of air contaminants or other material 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. [NCUAQMD **Rule 104 Section 1.1** Reg. 1 Rule 400(a).]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

VISIBLE EMISSIONS

AQ-1924 The owner, operator or permittee of this ~~Title V~~ source 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 more than three minutes in any one hour which is:

- A. As dark or darker in shade as that designated No. 2 (~~36~~-minute average), 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 **forty percent (40%) opacity** ~~No. 2 on the Ringelmann Chart.~~ [NCUAQMD Rule 410] [NCUAQMD Reg. I Rule 104 Section 2 (5/19/05).]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

PARTICULATE MATTER

AQ-2025 A. General Combustion Sources

The permittee of this ~~Title V~~ source shall not discharge particulate matter into the atmosphere from any combustion source in excess of 0.46 grams per standard cubic meter (0.20 grains per standard cubic foot) of exhaust gas, calculated to 12 percent carbon dioxide; or in excess of the limitations of **New Source**

Performance Standards (NSPS) (District Rule 104 Section 11.0) Rule 490, as applicable.

B. Steam Generating Units

The permittee ~~of this Title V source~~ shall not discharge particulate matter into the atmosphere from any steam generating unit, installed or modified after July 1, 1976, in excess of 0.23 grams per standard cubic meter (0.10 grains per standard cubic foot) of exhaust gas, calculated to 12 percent carbon dioxide; or in excess of the limitations of NSPS ~~Rule 490~~.

C. Steam Generating Utility Power Plants

Notwithstanding the limitations set out above, no steam generating power plants which produce electric power for sale to any public utility shall discharge particulate matter into the atmosphere in excess of 0.10 pounds per million BTU heat input or any other specific applicable permit limitation, whichever is the more restrictive emission condition.

D. Non-Combustion Sources

The permittee ~~of this Title V source~~ shall not discharge particulate matter into the atmosphere from any non-combustion source in excess of 0.46 grams per actual cubic meter (0.20 grains per cubic foot) of exhaust gas or in total quantities in excess of the maximum allowable process weight rate as follows:

TABLE I

ALLOWABLE RATE OF EMISSION BASED ON PROCESS WEIGHT RATE					
Process Weight Rate		Emission	Process Weight Rate		Emission
Lb/Hr	Kg/Hr	Lb/Hr	Lb/Hr	Kg/Hr	Lb/Hr
100	45	0.55	6,000	2,720	8.6
200	92	0.88	7,000	3,380	9.5
400	183	1.4	8,000	3,680	10.4
600	275	1.83	9,000	4,134	11.2
800	377	2.22	10,000	4,540	12.0
1,000	454	2.58	12,000	5,460	13.6
1,500	681	3.38	16,000	7,260	16.5
2,000	920	4.1	18,000	8,220	17.9
2,500	1,147	4.76	20,000	9,070	19.2
3,000	1,362	5.38	30,000	13,600	25.2
3,500	1,690	5.96	40,000	18,100	30.5
4,000	1,840	6.52	50,000	22,700	35.4
5,000	2,300	7.58	60,000	27,200	40.0

Where the process weight per hour is between two listed figures, such process weight and maximum allowable particulate emission per hour shall be interpolated linearly. The total process weight of all similar process operations located at a single plant or of similar multiple plants located on a single premise, shall be used for determining the maximum allowable particulate emission from the combination of such operations. [NCAQMD Rule 420] [NCAQMD Reg I Rule 104 (5/19/05).]

Verification: The project owner shall submit the results of source tests to both the district and CPM in accordance with Condition **AQ-159164**.

AQ-2126 The permittee of this Title V source shall not handle, transport or store or allow open storage of materials in such a manner which allows or has the potential to allow unnecessary amounts of particulate matter to become airborne. Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to, the following:

- A. Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.

- B. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Containment methods can be employed during sandblasting and other similar operations.
- C. Conduct agricultural practices in such a manner as to minimize the creation of airborne dust.
- D. The use of water or approved dust surfactants for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- E. The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
- F. The paving of roadways and their maintenance in a clean condition.
- G. The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means. [~~NCUAQMD Rule 430~~] [~~NCUAQMD Reg I Rule 104 Section 4 (5/19/05).~~]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

SULFUR COMPOUNDS

AQ-2227 ~~The owner(s), operator(s) or permittee(s) of this Title V source shall not discharge into the atmosphere from any single source of emissions whatsoever sulfur oxides (calculated as sulfur dioxide (SO₂)) in excess of 1,000 ppm; or in excess of the specific source emission limitations of Federal New Source Performance Standards, as applicable. [NCUAQMD Rule 440] [NCUAQMD Reg I Rule 104 Section 5 (5/19/05).]~~

Verification: The project owner shall submit the results of source tests to both the district and CPM in accordance with Condition **AQ-159164**.

OPEN BURNING

AQ-2328 ~~The permittee of this Title V source shall not ignite or cause to be ignited or suffer, allow or maintain any open outdoor fire for the disposal of rubber, petroleum or plastic wastes, demolition debris, tires, tar paper, wood waste, asphalt shingles, linoleum, cloth, household garbage or other combustible refuse; or for metal salvage or burning of motor vehicle bodies. No other open burning shall occur without the owner, operator(s) or permittee having first obtained a Coordinated Authorized Burn Permit from the APCO. [NCUAQMD Reg 2 Rules 200 & 201.]~~

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

EQUIPMENT BREAKDOWNS

- AQ-2429** The permittee shall comply with the emergency provisions contained in all applicable federal requirements.
- A. Within two weeks of an emergency event, the owner(s), operator(s) or permittee's responsible official shall submit to the APCO a signed contemporaneous log or other relevant evidence which demonstrates that:
1. An emergency occurred.
 2. Identification of the cause(s) of the emergency.
 3. The facility was being properly operated at the time of the emergency.
 4. Identification of each and every step taken to minimize the emissions resulting from the emergency.
 5. Within two working days of the emergency event, the permittee shall notify the APCO with a description of the emergency and any mitigating or corrective actions taken.
- B. The permittee has the burden of proof to establish that an emergency occurred in any enforcement proceeding. [NCUAQMD **Rule 105 Section 5.0** Reg. 5 Rule 450.]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

TITLE VI REQUIREMENTS (OZONE DEPLETING SUBSTANCES)

- AQ-2530** The permittee of this Title V source ~~shall not~~ allowing or ~~cause~~ causing the opening of appliances containing **chlorofluorocarbons (CFCs)** for maintenance, service, repair, or disposal **unless first complying** with the required practices set out ~~in and~~ pursuant to 40 C.F.R. 82.156. [40 C.F.R. 82 Subpart F.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

- AQ-2631** Equipment used during the maintenance, service, repair, or disposal of appliances containing CFCs shall comply with the standards for recycling and recovery equipment set out in and pursuant to 40 C.F.R. 82.158. [40 C.F.R. 82 Subpart F.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

- AQ-2732** The permittee and its contractors and agents performing maintenance, service, repair or disposal of appliances containing CFCs must be certified by an approved technician certification program set out in and pursuant to 40 C.F.R. 82.161. [40 C.F.R. 82 Subpart F.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

ASBESTOS

AQ-2833 The permittee of this Title V source shall comply with the standards of 40 C.F.R. 61 Subpart M which regulates demolition and renovation activities pertaining to asbestos materials.

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

PAYMENT OF FEES

AQ-2934 The permittee of this Title V source shall pay an annual permit fee and other fees as required in accordance with NCUAQMD ~~Rules~~ **Rule 300**. Failure to pay these fees by the dates due will result in immediate suspension of this ~~Title V Permit to Operate~~ **Authority to Construct/PSD Permit** effective on the date the fees were due, and on notification by the APCO of such suspension. Operation without an effective ~~Title V~~ **Authority to Construct/PSD** permit subjects the owner(s), operator(s) and permittee(s) to potential enforcement action by the NCUAQMD and the U.S. EPA pursuant to Section 502(a) of the Clean Air Act as amended in 1990. [NCUAQMD ~~Regulation IV Rule 406 Reg. 5 Rule 670.~~]

Verification: The project owner shall submit to the CPM and APCO the annual operational reports that include information on fees paid (**AQ-SC9** and **AQ-1520**).

ACCIDENTAL RELEASES

AQ-3035 If subject to Section 112(r) of the Clean Air Act (CAA) and 40 C.F.R. Part 68, the permittee(s) of this Title V permit shall register and submit to the U.S. 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 68.130. The list of substances, threshold quantities and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under Section 112(r)(1). [40 C.F.R. Part 68.]

Verification: Refer to **Haz-2**.

AQ-3136 If subject to Section 112(r) of the CAA and 40 C.F.R. Part 68, the permittee shall comply with the requirements of 40 C.F.R. Part 68 no later than the latest of the following dates as provided in 40 C.F.R. 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. [40 C.F.R. Part 68.]

Verification: The project owner shall submit to both the district and CPM the information required under this condition.

AQ-3237 If subject to Section 112(r) of the CAA and 40 C.F.R. Part 68, the permittee(s) shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 C.F.R. Part 68. [~~40 C.F.R. Part 68.~~]

Verification: The project owner shall submit to both the district and CPM the information required under this condition.

AQ-3338 If subject to Section 112(r) of the CAA and 40 C.F.R. Part 68, the permittee(s) shall annually certify compliance with all applicable requirements of Section 112(r) as part of the annual compliance certification. This annual compliance certification shall be submitted and received no later than January 30 of each year. [40 C.F.R. Part 68.]

Verification: The project owner shall submit to the CPM and APCO the certification requirement as part of the annual compliance certification (AQ-SC9).

CONDITIONAL TRANSFER OF OWNERSHIP

AQ-3439 In the event of any changes in control or ownership of these facilities, this permit together with its terms and conditions shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its Conditions by letter, a copy of which shall be forwarded to the NCUAQMD, and which shall identify the exact effective date of the transfer of ownership.

The new owner(s) and operator(s) of this ~~Title V~~ source shall notify the APCO within 30 (thirty) days of the transfer of ownership and which notification shall include a certification by the responsible party that the ~~Title V~~ facility operations are to be operated in the same operational parameters as set out herein, and as before the transfer of ownership.

Any permit or written authorization issued pursuant herein shall not be transferable, by operation of law or otherwise, from one location to another, or from one person to another, unless such transfer occurs as a condition of this permit or as a modification to the permit and with written notification to the APCO within 30 (thirty) days of transfer of ownership. [NCUAQMD **Rule 102 Section 5.0** ~~Rule 240.~~]

Verification: The project owner shall submit to both the district and CPM the notification within 30 days of the transfer of ownership (see also AQ-5459).

SEVERABILITY

AQ-3540 If any term or condition of this permit, for any reason, be adjudged by a court of competent jurisdiction to be invalid, such judgment shall not affect or invalidate the remainder of this permit. These permit conditions are enforceable individually and severally. [NCUAQMD **Rule 102 Section 5.0** ~~Reg. 5 Rule 610(h)~~] [40 C.F.R. 60.6(b)(5).]

Verification: No verification needed.

LOCAL ENFORCEABLE ONLY, GENERAL REQUIREMENTS

APPLICABILITY

AQ-3641 The requirements outlined in this section are non-federally enforceable local permit requirements. [NCUAQMD Rule 102]

Verification: No verification needed.

AQ-3742 The permittee of this ~~Title V~~ source shall not cause or permit the construction or modification of any new source of air contaminants or modifications to an existing source, either minor or major, without first having obtained an Authority to Construct (ATC) permit from the APCO.

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-3843 This permit is effective only upon payment of the initial permit fees set out in NCUAQMD Rules and Regulations.

Verification: No verification needed.

ADMINISTRATION

AQ-3944 This permit is issued pursuant to California Health and Safety Code Section 42300. Commencement of any act or operation authorized by this permit shall be conclusively deemed to be acceptance of all terms and conditions contained herein.

Verification: No verification needed.

AQ-4045 The permittee shall comply with all conditions of this permit. Any violation of any condition of this permit is a violation of NCUAQMD Rules and Regulations, and California State Law. [NCUAQMD Rule 105 §1.0.]

Verification: No verification needed.

AQ-4146 The permit conditions shall be liberally construed for the protection of the health, safety and welfare of the people of the NCUAQMD. [NCUAQMD Rule 100 §6.3; Rule 102 §5.0.]

Verification: No verification needed.

AQ-4247 The NCUAQMD Rules and Regulations may be superseded or revised by the NCUAQMD Board with notice as required by state law. It is permittee's responsibility to stay current with Rules and Regulations governing its business. The permittee is therefore expected to comply with all applicable Rules and Regulations. [NCUAQMD Rule 100 §6.0; Rule 105 §1.0]

Verification: No verification needed.

AQ-4348 Permit requirements apply to the facility owner and/or operator(s) and any contractor(s) or subcontractor(s) performing any activity authorized under this permit. Any person(s) including contractor(s), subcontractor(s), not in compliance with the applicable permit requirements are in violation of state and local laws and subject to appropriate civil and criminal penalties. The facility owner and/operator, and all contractor(s) or subcontractor(s) are strictly liable for the actions and violations of their employee(s). A violation committed by a contractor(s) or subcontractor(s) shall be considered a violation by the facility owner(s) and/or operator(s), and is also a violation by the contractor(s) and/or any subcontractor(s). [NCUAQMD Rule 105 §5.0]

Verification: No verification needed.

AQ-4449 Changes in plans, specifications, and other representations proposed in the application documents shall not be made if they will increase the discharge of emissions or cause a change in the method of control of emissions or in the character of emissions. Any proposed changes, regardless of emissions consequence, shall be submitted as a modification to this permit. No modification shall be made prior to issuance of a permit revision for such modification. [NCUAQMD Rule 102.]

Verification: The project owner shall submit to both the district and CPM the applications for permit modifications as needed.

AQ-4550 Knowing and willful misrepresentation of a material fact in the application for the permit, or failure to comply with any condition of the permit, or of the NCUAQMD Rules and Regulations, or any state or federal law, shall be grounds for revocation of this permit. [NCUAQMD Rule 102.]

Verification: No verification needed.

AQ-4651 Permittee shall not construct, erect, modify, operate, or use any equipment which conceals the emission of an air contaminant, which would otherwise constitute a violation of the limitations of this permit. [NCUAQMD Rule 104 §1.2.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-4752 This permit does not convey any property rights of any sort, or any exclusive privilege.

Verification: No verification needed.

AQ-4853 The "Right of Entry", as delineated in NCUAQMD Rule 109 §1.0 and California Health and Safety Code Section 41510 of Division 26, shall apply at all times. Failure to grant immediate access to NCUAQMD, CARB, or other authorized personnel shall be grounds for permit suspension or revocation.

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-4954 The APCO reserves the right to amend this permit in order to ensure compliance with all applicable federal, state, and local laws, rules and regulations or to mitigate or abate any public nuisance. Such amendments may include requirements for additional operating conditions, testing, data collection, reporting, and other conditions deemed necessary by the APCO.

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-5055 **The permit conditions shall be liberally construed for the protection of the health, safety and welfare of the people of the NCUAQMD.** In the event that two or more conditions may apply, and such conditions both cannot apply without conflict, the condition(s) most **restrictive** protective of the environment and the public health and safety shall prevail. ~~In the event that a condition(s) of the Permit and a requirement of a Federal, State or Local law, rule or Regulation may also apply, and both cannot apply without conflict, the requirements most protective of the environment and the public health and safety shall prevail.~~ [NCUAQMD Rule 100 §6.3; NCUAQMD Rule 102 §5.0.]

Verification: No verification needed.

AQ-5156 If any provision or condition of this permit is found invalid by a court of competent jurisdiction, such finding shall not affect the validity or enforcement of the remaining provisions. [NCUAQMD Rule 102 §5.0.]

Verification: No verification needed.

AQ-5257 This permit shall be posted in a conspicuous location at the site and shall be made available to NCUAQMD representatives upon request. [NCUAQMD Rule 102 §8.0.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-5358 The permittee shall pay an annual permit fee and other fees as required in accordance with NCUAQMD Regulation IV. Failure to pay these fees will result in the forfeiture of this permit. Operation without a permit subjects the source to potential enforcement action by the NCUAQMD. In the event of facility closure or change of ownership or responsibility, the new owner or operator shall be assessed and shall pay any unpaid fees. [NCUAQMD Regulation IV – Fees.]

Verification: The project owner shall submit to the CPM and APCO the annual operational reports that include information on fees paid (**AQ-SC9** and **AQ-1520**).

AQ-5459 This permit is not transferable from either one location to another, from one piece of equipment to another, or from one person to another, except as provided herein. In the event of any change in control or ownership of the subject facility, the permittee shall notify the succeeding owner of this permit and its conditions; and shall notify the

NCUAQMD of the change in control or ownership within fifteen (15) days of that change. [NCUAQMD Rule 400 §5.0.]

Verification: The project owner shall submit to both the district and CPM the notification within 15 days of the change in control or ownership (see also **AQ-3439**).

AQ-5560 A request for Transfer of Ownership of this permit shall be submitted to the APCO prior to commencing any operation of the subject equipment and/or operations by any owner(s) and/or operator(s) not otherwise identified in this permit. Failure to file the Transfer of Ownership constitutes a separate and independent violation, and is cause for voiding this permit. The burden of applying for a Transfer of Ownership is on the new owner(s) and/or operator(s). Any permit transfer authorized pursuant to a transfer of ownership request shall contain the same conditions as this permit. [NCUAQMD Rule 400 §5.0; Rule 102 §5.0.]

Verification: The project owner shall submit to both the district and CPM the request for transfer of ownership before commencing operation by a previously unidentified owner and/or operator (see also **AQ-3439**).

AQ-5661 For purposes of this permit, the terms identified in the Definition Section shall have the meaning set out **in District Rule 101 and as defined in the Definition section of this permit. In the event of any conflict between Rule 101 and the permit definitions, the Definitions section of this permit shall prevail** therein. [NCUAQMD Rule 102 §5.0.]

Verification: No verification needed.

EMISSIONS & OPERATION

AQ-5762 This permit does not authorize the emission of air contaminants in excess of those allowed by the Federal Clean Air Act, California Health and Safety Code or the Rules and Regulations of the NCUAQMD. This permit shall not be considered as permission to violate existing laws, ordinances, regulations or statutes of other governmental agencies.

Verification: No verification needed.

AQ-5863 Permittee shall not discharge such quantities of air contaminants or other material 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. **The opacity limitation is in effect at all times, including but not limited to startup, shutdown, and malfunction.** [CH&S §41700; NCUAQMD Rule 104 §1.1.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-5964 Permittee shall not discharge into the atmosphere from any source whatsoever any air contaminant for a period or periods more than three (3) minutes in any one hour which is as dark or darker in shade as that designated as No. 2 on the Ringelmann Chart, as published by the United States Bureau of Mines; or of such opacity as to obscure an observer's view to a degree equal to or greater than Ringelmann 2 or forty (40) percent opacity. [**California Health and Safety Code (CH&S) §41701**; NCUAQMD Rule 104 §2.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-6065 The handling, transporting, or open storage of material in such a manner which allows unnecessary amounts of particulate matter to become airborne shall not be permitted. Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. [NCUAQMD Rule 104 §4.0.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-6166 All equipment regulated by this permit shall at all times be maintained in good working order and shall be operated as efficiently as possible so as to ensure compliance with all applicable emission limits. For purposes of compliance with this requirement, good working order, efficient operation, and proper maintenance shall mean the implementation of all protocols, procedures, and activities recommended by the device manufacturer or those required by this permit. [NCUAQMD Rule 102 §5.0.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

RECORDS & TRAINING

AQ-6267 The permittee shall provide training and instruction to all **affected** contractor(s), sub-contractor(s), and employee(s). Training shall include the identification of all the requirements contained within this permit, and the appropriate method to be used to comply with the permit conditions. Training shall occur prior to any of the contractor(s), subcontractor(s), or employee(s) constructing or operating equipment authorized by this permit. Records documenting the persons receiving instruction and the instruction materials shall be made available to the APCO upon request. [NCUAQMD Rule 105 §5.0.]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-6368 Permittee shall furnish to the APCO, within a reasonable time, any information that the NCUAQMD may request to determine compliance with this permit or whether cause exists for modifying, revoking and reissuing, or terminating this permit. Upon

request, permittee shall also furnish to the NCUAQMD copies of records required to be kept by this permit. [CH&S §42303; NCUAQMD Rule 103 §6.0, Rule 102 §5.0]

Verification: The project owner shall submit to both the district and CPM the compliance information as needed.

PERMIT TERM

AQ-6469 Title V permit expiration terminates the permittee's right to operate the stationary sources itemized in this permit unless a timely and complete Title V permit application for renewal has been submitted in accordance with District Rule 502 §2.2, in which case the existing Title V permit will remain in effect until the Title V permit renewal has been issued or denied. [40 CFR 70.7(c) (1) (ii)]
~~This permit is issued pursuant to NCUAQMD Rule 110 Section 9 and shall only become effective after a Final Determination of Compliance has been issued by the APCO pursuant to NCUAQMD Rule 110 §9.6.~~

Verification: No verification needed.

AQ-6570 The authorization for equipment installation and construction activities identified in this permit shall expire no more than 545 days from date of issue, unless extended by the APCO for good cause shown. [NCUAQMD Rule 102 §5.0.]

Verification: No verification needed.

AQ-6671 Once the subject equipment has been constructed in compliance with the conditions of this permit, this Authority to Construct Permit shall serve as a Temporary Permit to Operate for a period not to exceed one hundred and eighty (180) days of operation. Should the need arise, the Temporary Permit to Operate may be extended by the APCO for up to an additional ninety (90) days for good cause shown. The burden of proof lies with the permittee to demonstrate good cause for such action. [CH&S §42301.1; NCUAQMD Rule 102 §2.0.]

Verification: No verification needed.

FEDERALLY ENFORCEABLE, EQUIPMENT-SPECIFIC REQUIREMENTS

AUTHORIZED EQUIPMENT

AQ-6772 The permittee shall install and construct the project as described in Authority to Construct application September 29, 2006 and its series of amendments ending with the most recent submittal of April 6, 2009 ~~February 27, 2008~~. Should discrepancies or contradictions exist between the application and this permit, the provisions of this permit shall prevail. The specific components authorized are listed in Table 1.0 and Table ~~2.0~~ 1.1 below. For each of the reciprocating internal combustion engines S-1 through S-10, both a Selective Catalytic Reduction system (SCR) and an oxidation catalyst shall be designated "A-(engine number) SCR" and "B-(engine number) oxidation catalyst respectively." [NCUAQMD Rule 504 §2.1.]

Table 1.0

Authorized Emission Devices

Unit No.	Equipment	Nominal Size
S-1	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #1, equipped with lean burn technology, abated by A-1 SCR and B-1 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-2	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #2, equipped with lean burn technology, abated by A-2 SCR and B-2 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-3	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #3, equipped with lean burn technology, abated by A-3 SCR and B-3 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-4	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #4, equipped with lean burn technology, abated by A-4 SCR and B-4 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-5	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #5, equipped with lean burn technology, abated by A-5 SCR and B-5 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-6	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #6, equipped with lean burn technology, abated by A-6 SCR and B-6 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-7	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #7, equipped with lean burn technology, abated by A-7 SCR and B-7 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-8	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #8, equipped with lean burn technology, abated by A-8 SCR and B-8 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-9	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #9, equipped with lean burn technology, abated by A-9 SCR and B-9 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-10	Wärtsilä 18V50DF Dual Fuel Reciprocating Engine #10, equipped with lean burn technology, abated by A-10 SCR and B-10 oxidation catalyst	148.9 MMBtu/hr 16.3 MW 22,931 BHp
S-11	Caterpillar DM8149 (or equivalent) Diesel-fired Emergency Reciprocating IC Engine powering a 350kW electrical generator	469 HP
S-12	Clarke/John Deere JU6H-UF50 (or equivalent) Diesel-fired Emergency Reciprocating IC Engine powering a fire water pump	210 HP

**Table 2-0 1.1
Authorized Control Devices**

Control Equipment	Manufacturer	Model	Specifications
Oxidation Catalyst	HUG Engineering (or equivalent)	OCT-0806-040-0062/450 (or equivalent)	Catalyst: Platinum Reactor Temperature: 608 °F to 908 °F Outlet Temperature: 608 °F to 908 °F Max Flow: 143,000 acfm Control Efficiency: 13ppmvd CO @15%O ₂ while in NG Mode; 20ppmvd CO @15%O ₂ while in diesel mode
Selective Catalytic Reduction System	HUG Engineering (or equivalent)	RFV-0890-040-200/300 (or equivalent)	Catalyst: Vanadium Pentoxide Reactor Temperature: 608 °F to 908 °F Outlet Temperature: 608 °F to 908 °F Max Flow: 143,000 acfm Control Efficiency: 6ppmvd NOx @15%O ₂ while in NG Mode; 35ppmvd NOx @15%O ₂ while in diesel mode

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-6873 The permittee shall not modify the equipment subject to this permit in such a manner so as to exceed the heat input capacities, or deviate from the nominal full-load design specifications as submitted in the AFC, and as identified in Table 1-12.0, Table 1-22.1, or Table 1-32.2. [NCUAQMD Rule 102 §5.0.]

**Table 1-1 2.0
S-1 Through S-10 Engine Specifications**

Primary Fuel	Natural Gas
Backup Fuel	CARB Diesel
Design Ambient Temperature	67.5 °F
Nominal Heat Input Rate (HHV)	143.9 MMBtu/hr natural gas plus 0.79 MMBtu pilot fuel (natural gas mode) – OR – 148.9 MMBtu/hr CARB Diesel Fuel (diesel mode)
Nominal Exhaust Temperature	728°F
<u>Nominal</u> Exhaust Flow Rate	121,500 acfm
Exhaust Release Height	100 Feet (above grade)

Nominal Exhaust O2 Concentration, dry volume	11.6%
Nominal Exhaust CO2 Concentration, dry volume	5.3%
Emission Controls	Lean Burn Technology and SCR; Oxidation Catalyst
SIC	4911
SCC	20100202 natural gas mode; 20100301 diesel mode

Table 1.2 2.1
S-11 Engine Specifications

Primary Fuel	CARB Diesel
Nominal Heat Input Rate (HHV)	4.0 MMBtu/hr
Heat Input, gal/hr	29.1
SIC	4911
SCC	20100301

Table 1.3 2.2
S-12 Engine Specifications

Primary Fuel	CARB Diesel
Nominal Heat Input Rate (HHV)	1.68 MMBtu/hr
Heat Input, gal/hr	12.3
SIC	4911
SCC	20201607

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-6974 The permittee shall only fire reciprocating engines S-1 through S-10 with fuel which meets or exceeds the fuel specifications identified in Tables 1.3 and 1.4 2.3. Prior to firing reciprocating engines S-1 through S-10 with an alternative fuel or CARB Diesel with additives, the permittee shall make a request to the APCO to switch fuel types. The request shall include all necessary information to characterize emission changes which may occur as a result of the change. The permittee shall not fire reciprocating engines S-1 through S-10 with a liquid fuel other than CARB Diesel without prior approval from the APCO. [NCUAQMD Rule 102 §5.0]

Table 1.4 2.3
Fuel Specifications for S-1 through S-10

Fuel Type	Property	Value
Natural Gas	Sulfur Content	< 1 gr / 100scf per test; annual average <0.33gr/100scf

CARB Diesel	Sulfur Content	< 15 ppm
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Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-7075 Reciprocating engines S-1 through S-10 shall be equipped with a monitoring system capable of measuring and recording hours of operation (in tenths of an hour) and fuel consumption (in cubic feet and gallons) while operating in natural gas/diesel pilot mode and diesel mode. The measuring devices shall be accurate to plus or minus 1% at full scale, and shall be tested at least once every twelve months or at more frequent intervals if necessary to ensure compliance with the 1 percent accuracy requirement. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-7176 The exhaust stacks shall not be fitted with rain caps or any other similar device which would impede vertical exhaust flow. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-7277 The permittee shall install and maintain a non-resettable hour meter with a minimum display capability of 9,999 hours upon the Emergency IC Diesel Generators S-11 and S-12. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-7378 The Emergency IC Diesel Generators S-11 and S-12 shall use one of the following fuels:

- 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. 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
- D. Any combination of a) through d) above.

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-7479 The reciprocating engines S-11 and S-12 shall be certified to meet the EPA Tier 3 emission levels. **The permittee shall submit documentation of EPA Tier 3**

certification a minimum of 30 days prior to installation of the devices. [40 C.F.R. 60 Subpart III]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-7580 The permittee shall obtain APCO approval for the use of any equivalent engine for S-11 or S-12 not specifically approved by this Authority to Construct. Approval of an equivalent engine shall be made only after the APCO's determination that the submitted design and performance data for the proposed IC engine is equivalent to the approved engine. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to both the district and CPM the application for equivalent emergency engines as needed.

AQ-7681 The permittee's request for approval of an equivalent engine shall include the following information: engine manufacturer and model number, horsepower (hp) rating, exhaust stack information, and manufacturer's guaranteed emission concentrations. [NCUAQMD Rule 504 §4.0; NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to both the district and CPM the application for equivalent emergency engines as needed.

AQ-7782 The permittee's request for approval of an equivalent engine shall be submitted to the NCUAQMD at least **thirty (30)** ~~90~~ days prior to the planned installation date. The permittee shall also notify the NCUAQMD at least **ten (10)** ~~30~~ days prior to the actual installation of the NCUAQMD approved equivalent engine. [NCUAQMD Rule 103 §6.0]

Verification: The project owner shall submit to both the district and CPM the application for equivalent emergency engines at least ~~90~~ **thirty (30)** days prior to the planned installation date.

AQ-7883 The permittee shall install exhaust gas temperature monitoring devices at the inlet and the outlet of the oxidation catalyst. [40 C.F.R. §63.6625; BACT]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-7984 Ammonia injection points shall be equipped with operational ammonia flow meters and injection pressure indicators. The flow meters shall be accurate to plus or minus 1 percent at full scale and shall be calibrated at least once every twelve months or at more frequent intervals if necessary to ensure compliance with the 1 percent requirement. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-8085 The permittee shall install points of access to the emission devices, control devices, and continuous emission monitoring devices such that source testing in accordance with the appropriate reference test methods can be performed. All points of access shall conform to the latest Cal-OSHA safety standards. For purposes of compliance with this part, appropriate test methods shall mean the test methods identified in the Testing and Compliance Monitoring Conditions section of this permit; and the collection of gas samples with a portable NO_x, CO, and O₂ analyzer. Sample collection ports shall be located in accordance with 40 C.F.R. Part 60 Appendix A, and with the CARB document entitled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-8186 Each reciprocating engine **S-1 through S-10** shall be equipped with a continuous emission monitor (CEM) for NO_x, CO, and O₂. Continuous emissions monitor(s) shall meet the requirements of 40 C.F.R. part 60, Appendices B and F, and NCUAQMD-approved protocol during normal operations. The monitors shall be designed and operated so as to be capable of monitoring emissions during normal operating conditions and during startup and shutdown periods. [NCUAQMD Regulations Appendix B]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-8287 The permittee shall demonstrate compliance with the ammonia slip limit by using the following calculation procedure: ~~The ammonia emission concentration shall be verified by the continuous recording of the ratio of the ammonia injection rate to each the NO_x inlet rate into the SCR control system~~ **shall be continuously recorded (molar ratio). Correlations between the engine heat input rates, the SCR system ammonia injection rates, and corresponding ammonia emission concentration** ~~The maximum allowable NH₃:NO_x molar ratio shall be determined~~ **for each fuel in accordance with the Testing and Compliance Monitoring section of this permit during any required source test, and shall not be exceeded until reestablished through another valid source test.** Alternatively, the permittee may be required to install, operate, and maintain a continuous in-stack emissions monitor for emissions of ammonia. The permittee shall obtain APCO approval for the installation and use the ammonia CEMs equipment at least 60 days prior to the planned installation date. [NCUAQMD Rule 103 §6.0]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-8388 Both onsite and offset emission credits were utilized for this project. Prior to commencement of construction, in accordance with Rule 106 §6.6, the permittee shall provide to the NCUAQMD APCO documentation of transfer of ownership of offsite

emission reduction credits sufficient to offset the emissions identified in Table 3. Prior to commencement of the commissioning period, the permittee shall surrender to the NCUAQMD sufficient offsite emission credits to offset the increases listed in Table 3.0 below. NOx credits provided to offset PM₁₀ increases shall be at an inter-pollutant ratio of 3.58:1 after the appropriate distance ratio is applied. The permittee shall permanently shut down the ~~existing facility and all emission units permitted under Title V Permit To Operate NCU 059-12~~ **NCUAQMD Permit Units No. NS-020 (Boiler #1), NS-021 (Boiler #2) and NS-057 (Turbines #2 and #3)** in accordance with **the Startup, Commissioning & Simultaneous Operation section of this permit Condition #110.** [40 C.F.R. 51, Appendix S; NCUAQMD Rule 110]

**Table 3.0
HBRP Required Offsite Offsets By Quarter**

Pollutant	Pollutant Quantities in Tons			
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
PM ₁₀	2.45	2.35	2.37	2.34
ROC	0.62	0.59	0.59	0.59

Verification: The project owner shall submit to both the district and CPM the information on emission reduction credits prior to construction.

EMISSION LIMITING CONDITONS

AQ-8489 The permittee shall not discharge particulate matter into the atmosphere from any combustion source in excess of 0.20 grains per cubic foot of dry gas calculated to 12 percent CO₂ at standard conditions. [NCUAQMD Rule 104 §3.1]

Verification: The project owner shall submit the results of source tests to both the district and CPM in accordance with condition **AQ-159164.**

AQ-8590 The permittee shall not discharge sulfur dioxide into the atmosphere **from reciprocating engines S-1 through S-12 such** in excess of 1000 ppmv **for any single device or more than** 40 tons per year **as a combination of all devices.** [NCUAQMD Rule 104 §5.0]

Verification: The project owner shall submit the results of source tests to both the district and CPM in accordance with condition **AQ-159164.**

AQ-8691 Visible emissions from reciprocating engines S-1 through S-12 shall not be as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, or of such opacity so as to obscure an observer's view to a degree equal to or greater than 20 percent, for any period or periods more than 3 minutes in any one hour. This visible emission limitation shall not apply during startup or shutdown periods, **or during the commissioning period.** [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-8792 The permittee shall not operate reciprocating engines S-1 through ~~S-10~~ **S-12** such that the emissions of NOx, from a combination of all engines, exceeds 392 lbs per hour. Furthermore, except as ~~provided below~~ **during the commissioning period**, the permittee shall not operate reciprocating engines S-1 through S-10 such that more than 2 units are in a diesel startup period during any one clock hour. ~~Following completion of the emissions testing for all ten units required under Condition #163, the Permittee may request the use of an alternative compliance demonstration method. Such a request shall include, but not be limited to the following:~~ **[NCUAQMD Rule 102 §5.0]**

- ~~A. Identification of alternative operational limit(s) and/or alternative method(s) for determining compliance with the facility wide pound per hour NOx emission limit; and~~
- ~~B. Source test data and calculations demonstrating that revisions to emission factors, and/or utilization of an alternative compliance determination method, are appropriate.~~

~~Upon written approval by the District of the alternative compliance demonstration method, the permit limitation on the number of Diesel Mode Startups may be modified. In no event shall the facility wide hourly limit of 392 lbs of NOx be increased, nor any operational activities permitted, which would allow an exceedance of any emission limitation. [NCUAQMD Rule 102 §5.0]~~

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-8893 The permittee shall not discharge diesel particulate matter from reciprocating engines S-1 through S-10 while operating in diesel mode such that emissions of diesel particulate matter exceed 0.11 g/bhp-hr **for each engine**. [NSPS 40 C.F.R. Part 60 Subpart III]

Verification: The project owner shall submit the results of source tests to both the district and CPM in accordance with condition **AQ-159164**.

AQ-8994 The permittee shall not discharge carbon monoxide from reciprocating engines S-1 through S-10 in excess of 0.14 g/bhp-hr or 20 ppmvd @ 15% O₂. [40 C.F.R. 63 Subpart ZZZZ]

Verification: The project owner shall submit the results of source tests to both the district and CPM in accordance with condition **AQ-159164**. A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

HEAT INPUT & FUEL LIMITATIONS

Engines S-1 Through S-10

AQ-9095 The permittee shall not operate reciprocating internal combustion engines S-1 through S-10 in such a manner so as to exceed the heat input capacities listed in Table 4.0 on a per engine basis. [NCUAQMD Rule 102 §5.0]

**Table 4.0
Heat Input Limitations Per Engine**

Each Unit ¹		Heat Input, MMBtu (HHV)	
		Hourly 3 hr rolling average	Calendar Day Daily 24 hour rolling average
Natural Gas Mode ²	Natural Gas	143.9	3,454
	Diesel (Pilot)	0.8	19
Diesel Mode	Diesel	148.9	3,574

Notes:

- 1) Each unit can only run in either natural gas or diesel mode, not both simultaneously.
- 2) Heat input in natural gas mode is the sum of natural gas and diesel pilot also.

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-9196 The permittee shall not operate reciprocating internal combustion engines S-1 through S-10 in such a manner so as to exceed the heat input capacities listed in Table 4.1 below calculated as a sum of all 10 engines. **Fuel combusted during compliance testing shall not accrue toward the limitations established in this condition.** [NCUAQMD Rule 102 §5.0]

**Table 4.1
Heat Input Limitations S-1 Through S-10 Engines Combined**

Sum of All 10 Units		Heat Input, MMBtu (HHV)		
		Hourly	Daily	Annual
Natural Gas Mode ¹	Natural Gas	1,439	34,536	9,277,233 ²
	Diesel Pilot	7.9	190	51,576
Diesel Mode	Diesel	1,489	30,376 ^{2,3}	148,900 ²

Notes:

- 1) Total heat input in natural gas mode is the sum of natural gas and diesel pilot.
- 2) ~~This limit applies to operation for maintenance and testing, and during periods of natural gas curtailments as defined in this permit. The limit shall not apply to fuel consumed during the commissioning period.~~
- 3) This limit was established to ensure compliance with the PM2.5 standard

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-9297 The permittee shall not exceed the diesel fuel firing limits listed in Table 4.2 below while operating reciprocating engines S-1 through S-10 in **the modes listed below**

natural gas mode. **Fuel combusted during compliance testing shall not accrue toward the limitations established in this condition.** [NCUAQMD Rule 102 §5.0]

A. Natural Gas Mode.

**Table 4.2
Diesel Fuel Firing Limitations (Pilot)**

Engines S-1 Through S-10	Gallons of Diesel Fuel		
	Hourly 3 hr rolling average	Daily (Calendar Day) 24-hour rolling average	Annual 365 day rolling average
All Combined	58	1,402	376,734

Verification: — A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-98 — The Permittee shall not exceed the diesel fuel firing limits listed in Table 4.3 below while operating reciprocating engines S-1 through S-10 in Diesel Mode.
[NCUAQMD Rule 102-§ 5.0]

B. Diesel Mode.

**Table 4.3
Diesel Fuel Firing Limitations**

Engines S-1 Through S-10	Gallons of Diesel Fuel		
	Hourly 3 hr rolling average	Daily (Calendar Day) 24-hour rolling average	Annual 365 day rolling average
Per Engine	1,088	26,106	—
All Combined	10,876	221,877 ^{1,2}	1,087,630 ¹

Notes:

- 1) This limit applies to operation for maintenance and testing, and during periods of natural gas curtailments as defined in this permit. The limit shall not apply to fuel consumed during the commissioning period.
- 2) This limit was established to ensure compliance with the PM2.5 standard (85 percent average load)

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

POLLUTANT LIMITATIONS

S-1 – S-10 Startup & Shutdown Periods

AQ-9399 The permittee shall not operate reciprocating engines S-1 through S-10, such that they individually discharge pollutants exceeding the limits identified in Table 5.0 below during startup or shutdown periods. [NCUAQMD Rule 102 §5.0]

**Table 5.0
Start & Shutdown Period Emission Limits**

Mode of Operation	Pollutant				
	NO _x	CO	ROC	PM ₁₀	SO _x
Natural Gas, lb/hr	23.6	24.1	17.9	3.6	0.4
Diesel Mode, lb/hr	164	25.5	17.2	10.8	0.22

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

S-1 – S-10 Natural Gas Mode

AQ-94100 The permittee shall not operate reciprocating engines S-1 through S-10, such that they individually discharge pollutants exceeding the limits identified in Table 5.1 below based upon a three (3) hour average with the exception of NO_x which shall be based upon a one (1) hour average. The limits shall not apply during startup or shutdown periods. [40 C.F.R. 63.6(f)(1), NCUAQMD Rule 102 §5.0]

**Table 5.1
Natural Gas Mode Emission Limits – per engine**

Pollutant	Emission Rate		
	ppmvd @ 15% O ₂	lb/hr	lb/MMBtu
CO	13	4.13	0.029
NH ₃	10	1.9	0.013
NO _x	6.0	3.1	0.022
PM ₁₀	-	3.6	-
ROC	28	5.1	0.035
Sox	-	0.40	0.0028

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-95101 The combined discharge of pollutants, from the reciprocating engines S-1 through S-10 shall not exceed the limits listed in Table 5.2 below during any calendar day in which none of the engines are operated in diesel mode for any period of time. For purposes of compliance with this condition, the emissions from startup and shutdown periods shall be included in the daily calculation of emissions. [NCUAQMD Rule 102 §5.0]

**Table 5.2
S-1 Through S-10 Combined Natural Gas Mode Limit**

Pollutant	Emission Rate lb/Day
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CO	1,589
NH ₃	456
NO _x	1,360
PM ₁₀	864
ROC	1,608
SO _x	97

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

S-1 – S-10 Diesel Mode

AQ-96402 The permittee shall not discharge pollutants into the atmosphere from the reciprocating engines S-1 through S-10 while in diesel mode, based upon a three (3) hour rolling average, in excess of the emission limits identified in Table 5.3 below. The limits shall not apply during startup or shutdown periods. [40 C.F.R. 63.6(f)(1), NCUAQMD Rule 102 §5.0.]

**Table 5.3
Diesel Mode Emission Limits – per engine**

Pollutant	Emission Rate		
	ppmvd @ 15% O ₂	lb/hr	lb/MMBtu
CO	20.0	6.9	0.047
NH ₃	10	2.1	0.014
NO _x	35.0	19.9	0.134
PM ₁₀	-	10.8	0.137
ROC	40.0	7.9	0.053
SO _x	0.40	0.22	0.0016

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-97403 The discharge of diesel particulate matter into the atmosphere from the reciprocating engines S-1 through S-10 while in diesel mode shall not exceed the emission limits identified in Table 5.4 below. The limits shall not apply during the commissioning period as defined in this permit. [NCUAQMD Rule 102 §5.0]

**Table 5.4
Diesel Particulate Matter Limitations**

Engines S-1 Through S-10	Diesel Particulate Matter (pounds)		
	Hourly 3 hr rolling average	Daily (Calendar Day) 24-hour rolling average	Annual 365 day rolling average
Per Engine	5.56	133.4	—
All Combined	55.6	1,334	5,560

AQ-104 The combined discharge of pollutants from the reciprocating engines S-1 through S-10 during any calendar day shall not exceed the limits listed in Table 5.5 below during any calendar day in which one or more of the engines are operated in diesel mode for any period of time. ~~For purposes of compliance with this condition, the emissions from Startup and Shutdown Periods shall be included in the daily calculation of emissions.~~

Table 5.5
S-1 Through S-10 Combined Diesel Mode Limit

Pollutant	Emission Rate lb/Day
CO	2,219
NH ₃	506
NO _x	9,103
PM10	1,542
ROC	2,183
SO _x	97

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-98 For purposes of determining compliance of reciprocating engines S-1 through S-10 with the daily PM10 limit in Table 5.5, the permittee shall **calculate and record PM10 emissions from each engine for each calendar day as follows: 0.180 pounds per minute times the number of operational minutes in diesel mode during that calendar day; plus 0.060 pounds per minute times the number of natural gas mode operational minutes during that calendar day. In no event shall the permittee not operate reciprocating the engines S-1 through S-10 such that their combined hours of operation in diesel mode exceed for more than 142 engine-hours per day calendar day.** Following completion of the PM10 emissions testing required under Condition #163 on all 10 engines, the Permittee may request the use of an alternative compliance demonstration method. Such a request shall include, but not be limited to the following:

- A. ~~Identification of the highest PM emission rates of the 10 units as determined during initial performance testing.~~

~~B. Identification of alternative operational limit(s) and/or alternative method(s) for determining compliance with the facility wide pound per day PM emission limit; and~~

~~C. Source test data and calculations demonstrating that revisions to emission factors and/or compliance determination method(s) are appropriate.~~

~~Upon written approval by the District of the alternative compliance demonstration method, the permit limitation on the number of hours of operation in Diesel Mode may be modified. The highest PM pollutant values identified during the initial performance testing shall become the permitted emission limits for all engine units. In no event, shall the newly established emission limits be in excess of 10.8 lbs/hr. (the manufacturer's guaranteed emission rates identified in the AFC), and in the ATC materials submitted by the applicant. In no event shall the facility wide daily limit of 1,542 pounds be increased, nor any operational activity permitted, which would allow an exceedance of any emission limitation. Compliance with the daily facility wide PM emission limit shall be calculated as a function of engine hourly emission rate times the number of hours of operation per day. [NCUAQMD Rule 102 §5.0]~~

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-99105 The combined discharge of pollutants from the reciprocating engines S-1 through S-10 during any calendar year shall not exceed the limits listed in Table 5.6 below. [NCUAQMD Rule 102 §5.0]

**Table 5.6
S-1 Through S-10 Combined Annual Emission Limits**

Pollutant	Emission Rate Tons/Yr
CO	172.7
NH ₃	63.3
NOx	179.1
PM10	119.8
ROC	190.8
Sox	4.3

Verification: The project owner shall submit to the CPM and APCO the annual operational reports that include monitoring and compliance results (AQ-SC9 and AQ-1520).

Engines S-11 and S-12

AQ-100106 The permittee shall not operate reciprocating engines S-11 and S-12 such that pollutant discharge into the atmosphere exceeds the quantities in Table 5.7 below. [NCUAQMD Rule 102 §5.0]

**Table 5.7
Reciprocating Engines S-11 and S-12 Emission Limits**

Unit	Pollutant	g/Hp – hr	lb/hr
S-11 Emergency Generator	CO	0.63	0.65
	DPM	0.05	0.05
	NOx	3.47	3.59
	ROC (non-methane HC)	0.4	0.41
	SOx	—	0.0061
S-12 Fire Pump	CO	0.59	.27
	DPM	0.14	0.06
	NOx	4.9	2.27
	ROC (non-methane HC)	0.5	0.23
	SOx	—	0.0026

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-101407 The combined discharge of pollutants from the reciprocating engines S-11 through S-12 during any calendar year shall not exceed the limits listed in Table 5.8 below. [NCUAQMD Rule 102 §5.0]

**Table 5.8
S-11 and S-12 Combined Annual Emission Limits**

Pollutant	Emission Rate lbs/Yr
CO	45
NOx	287
DPM	5.5
ROC	31.5
SOx	0.4

Verification: The project owner shall submit to the CPM and APCO the annual operational reports that include monitoring and compliance results (AQ-SC9 and AQ-1520).

STARTUP COMMISSIONING & SIMULTANEOUS OPERATION

AQ-102408 The permittee shall discontinue operation of permit units ~~This permit supplements existing NCUAQMD permit numbers for the HBPP of NS-020 (Boiler #1), NS-021 (Boiler #2) and NS-057 (Turbines #2 and #3) and shall surrender the Permits to Operate for these permit units within 180 days after initial startup of reciprocating engines S-1 through S-10~~ such time as the sources are decommissioned. [NCUAQMD Rule 102 §5.0]

Verification: No verification needed.

AQ-103 **The permittee shall develop, implement, and maintain a written commissioning plan for reciprocating engines S-1 through S-10 that describes specific procedures to be followed during the commissioning period. The commissioning plan shall be submitted to the NCUAQMD at least thirty (30) days prior to the first operation of the first of reciprocating engines S-1 through S-10. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the reciprocating engines, the installation and operation of the SCR systems and the oxidation catalysts, the installation, calibration, and testing of the NOx and CO continuous emissions monitors, and any activities requiring the firing of each unit without abatement by an SCR system or oxidation catalyst. The plan shall provide that the reciprocating engines S-1 through S-10 shall be commissioned in two groups of five engines each; that each of the existing boilers [NCUAQMD Permit Units NS-020 (Boiler #1) and NS-021 (Boiler #2)] shall be replaced by one of the groups of engines; and that each boiler and its associated group of engines shall not be in operation simultaneously for more than 90 calendar days. Operation of a boiler and any of its associated engines for any portion of a calendar day shall accrue toward the maximum limit of 90 days applicable to that boiler. [NCUAQMD Rule 102 §5.0; Rule 110 Section 8.8]**

Verification: **The project owner shall submit to the CPM and APCO for approval the commissioning plan at least 30 days prior to the first operation of the reciprocating engines.**

AQ-104 **The commissioning plan is subject to NCUAQMD review and approval. If the NCUAQMD does not act to approve, reject, or request additional information within thirty (30) days of receipt of the plan submitted by the permittee, the plan shall be considered to be approved. The permittee shall not commission reciprocating engines S-1 through S-10 unless an NCUAQMD approved commissioning plan is in effect. [NCUAQMD Rule 102 §5.0]**

Verification: **The project owner shall submit to the CPM and APCO for approval the commissioning plan at least 30 days prior to the first operation of the reciprocating engines.**

AQ-105113 **In accordance with the NCUAQMD approved commissioning plan required under the Startup, Commissioning & Simultaneous Operation section of this permit Condition #123, the reciprocating engines shall be tuned to minimize emissions in the time frame specified in the approved commissioning plan. [NCUAQMD Rule 102 §5.0]**

Verification: **The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in AQ-103123.**

AQ-106109 **The permittee shall notify the NCUAQMD of the anticipated date of initial startup of the reciprocating engines S-1 through S-10 not more than 60 days, or less than 30**

days prior to initial startup. The permittee shall notify the APCO of the actual startup of reciprocating engines S-1 through S-10 not more than 15 days after actual initial startup. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO the notification of reciprocating engine startup not more than 60 days or less than 30 days prior to initial startup, and notification of actual startup not more than 15 days after initial startup.

AQ-107440 The existing generating units at Humboldt Bay Power Plant shall be shut down as soon as possible following the commercial operation of all of the reciprocating engines S-1 through S-10. The existing generating units at Humboldt Bay Power Plant [NCUAQMD Permit Units NS-020 (Boiler #1), NS-021 (Boiler #2) and NS-057 (Turbines)] and any of the new ~~HBRP~~-**HBGS** reciprocating engines S-1 through S-10 shall not be in simultaneous operation for more than 180 calendar days, including their individual commissioning periods; and shall be shutdown and their Permits to Operate (PTOs) surrendered once engines S-1 through S-10 have successfully completed their commissioning phase as defined elsewhere in this permit. Operation of the existing plant units and any engine or engines for any portion of a calendar day, shall accrue toward the maximum limit of 180 days. **Commissioning activities may be further limited in scope and duration by the NCUAQMD approved commissioning plan.** [NCUAQMD Rule 110, Rule 102 §5.0]

Verification: The project owner shall surrender to the CPM and APCO the permits for **each existing boiler (NCUAQMD Permit Units NS-020 and NS-021) and the turbines (Permit Units NS-057)** existing units at Humboldt Bay Power Plant within 180 **days** after initial startup of the new reciprocating engines.

AQ-108444 Selective catalytic reduction (SCR) systems and oxidation catalysts shall serve each **of the reciprocating engines S-1 through S-10** ~~reciprocating engine~~ except as provided for in **the district-approved commissioning plan required under the Startup, Commissioning & Simultaneous Operation section of this permit-Condition #114.** Permittee shall submit SCR and oxidation catalyst design details to the NCUAQMD for review and approval at least 90 days prior to scheduled delivery of these systems to the site. The permittee shall not install or operate the SCR and oxidation catalyst systems without authorization from the APCO. [NCUAQMD Rule 110, Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the design details for control devices not ~~more~~-**less** than 90 days prior to scheduled delivery.

AQ-109442 Permittee shall submit continuous emission monitor design, installation, and operational details to the NCUAQMD within 120 days following commencement of construction. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the details for continuous emission monitors not more than 120 days after commencing construction.

AQ-~~110114~~ In accordance with the NCUAQMD approved commissioning plan required under **the Startup, Commissioning & Simultaneous Operation section of this permit Condition #123**, the Selective Catalytic Reduction (SCR) system and the oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from each reciprocating engine in the time frame specified in the commissioning plan. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-~~103123~~**.

AQ-~~111415~~ The continuous monitors specified in **the Authorized Equipment section of this permit Conditions #75, #83, and #86** shall be installed, calibrated, and operational prior to the first firing of reciprocating engines S-1 through S-10. After first firing, the detection range of the CEMS shall be adjusted as necessary to accurately measure the resulting range of NOx and CO emission concentrations. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-~~112116~~ The permittee shall record and monitor the parameters identified in Table 7.0 of this permit at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). The permittee shall use APCO approved methods to calculate heat input rates, oxides of nitrogen mass emission rates (reported as nitrogen dioxide), carbon monoxide mass emission rates, and NOx and CO emission concentrations, summarized for each hour and each day. [NCUAQMD Rule 102 §5.0; NCUAQMD Regulation Appendix B]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-~~113117~~ The total number of firing hours of each reciprocating engine S-1 through S-10 without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 100 hours for each engine during the commissioning period. Such operation of each reciprocating engine without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and the oxidation catalyst in place. Upon completion of these activities for each engine, the permittee shall provide written notice to the NCUAQMD and the unused balance of the allowable firing hours without abatement for that engine shall expire. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-~~103123~~**.

AQ-~~114118~~ **A.** When one or more reciprocating engines S-1 through S-10 are undergoing commissioning activities without an SCR system and oxidation catalyst installed, the permittee shall not: [NCUAQMD Rule 102 §5.0]

- ~~a. A.~~ Fire more than five uncontrolled reciprocating engines simultaneously.
- ~~b. B.~~ Operate the uncontrolled engines such that their combined hours of operation exceed 90 engine-hours during any Calendar Day.

B. When one or more reciprocating engines S-1 through S-10 are undergoing commissioning activities, including the test run and tune phase, the permittee shall not: ~~C. Operate the uncontrolled engines such that their combined hours of operation while in the "alignment phase" exceed 13 engine hours during any Calendar Day.~~

- a. Simultaneously operate more than five units which have not yet completed commissioning.**
- b. Operate in diesel mode startup any unit which has completed commissioning while there are any non-commissioned units in operation.**

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-103123**.

AQ-115119 ~~During the commissioning period while any of the engines are being operated without an SCR system and oxidation catalyst, the permittee shall not operate reciprocating engines S-1 through S-10, such that the combined emissions from all of the engines regardless of their commissioning status, exceed any of the limits in Table 5.9 below: [NCUAQMD Rule 102 §5.0]~~

**Table 5.9
S-1 through S-10 Combined Commissioning Emission Limits**

Pollutant	lbs/hr	lbs/day
CO	197.2	2,662
NOx	323.3 392	4,365
PM ₁₀	54	1,296
ROC (as Methane)	86.6	1,559
SOx (SO ₂)	2.0	48.4

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-103123**.

AQ-116120 For each engine during its commissioning period, after ~~four hours of steady-state operation of the SCR system and the oxidation catalyst has occurred, the NOx and CO emissions from that reciprocating engine shall thereafter comply with the limits specified in~~ **the Pollutant Limitations section of this permit Conditions #99 through #105.** For purposes of compliance with this condition, steady-state operation shall mean: the engine, SCR system, and oxidation catalyst all functioning according to manufacturers' specifications and operating in compliance with emission limits as ~~determined by the CEMS~~ **and are ready for performance testing in accordance**

with the requirements of Testing and Compliance Monitoring section of this permit. In no event shall the commissioning period for each engine exceed 180 consecutive calendar days beginning on the first day the engine is first fired. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-103123**.

AQ-117121 Firing hours on 100 percent CARB Diesel Fuel or Alternative Liquid Fuel during the commissioning period shall not be considered maintenance and testing for purposes of compliance with the annual operating hour limitations specified in the Operational Conditions section of this permit. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-103123**.

AQ-118122 The total mass emissions of NO_x, CO, ROC, PM₁₀, and SO_x that are emitted from the reciprocating engines during the commissioning period shall accrue towards the annual emission limits specified in **Pollutant Limitations section of this permit Condition #107.** [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-103123**.

~~**AQ-123**—The Permittee shall submit a plan to the NCUAQMD at least four weeks prior to the first operation of the first of reciprocating engines S-1 through S-10, describing the procedures to be followed during the Commissioning Period. The plan shall include a description of each Commissioning Activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the reciprocating engines, the installation and operation of the SCR systems and the oxidation catalysts, the installation, calibration, and testing of the NO_x and CO continuous emissions monitors, and any activities requiring the firing of each unit without abatement by an SCR system or oxidation catalyst. [40 C.F.R. Part 63; NCUAQMD Rule 102 § 5.0]~~

~~**Verification:**—The project owner shall submit to the CPM and APCO for approval the commissioning plan at least four weeks prior to the first operation of the reciprocating engines.~~

AQ-119124 Not later than 90 days prior to first operation, the permittee shall prepare and submit to the NCUAQMD for approval a plan for complying with the requirements of 40 C.F.R. 63 Subpart ZZZZ. This compliance plan shall provide for an initial performance test on each **of the reciprocating engines S-1 through S-10** to demonstrate that each oxidation catalyst is achieving a minimum 70 percent reduction in CO over a four hour period. During the initial performance test, the continuous emission monitors shall successfully complete a performance evaluation in accordance using **Performance Specification (PS) 3** and **PS 4A** of 40 C.F.R. Part 60 Appendix B; the oxidation catalyst pressure drop and inlet temperature shall be measured using

ASTM D6522-00 [§63.6625(a)]; and the CEMS data collected in accordance with §63.6625(a) with the data reduced to 1-hour averages.

Verification: The project owner shall submit to the CPM and APCO for approval the ~~commissioning~~ **40 C.F.R. 63 Subpart ZZZZ compliance plan no less than 90 days before operation as required in AQ-123. If the district does not act to approve, reject, or request additional information within thirty (30) days of receipt of the plan submitted by the permittee, the plan shall be considered to be approved by the district.**

AQ-120125 Not later than 90 days prior to first operation, the permittee shall prepare and submit to the NCUAQMD for approval a plan for complying with the requirements of 40 C.F.R. 60 Subpart IIII. This compliance plan shall provide for an initial performance test on each **of the** reciprocating engines **S-1 through S-10** to demonstrate compliance with the NOx and PM limitations of 40 C.F.R. §60.4204(c)(1) and (c)(2) and shall establish operating parameters to be monitored continuously to ensure that each reciprocating engine continues to meet the applicable emission standards.

Verification: The project owner shall submit to the CPM and APCO for approval the ~~commissioning~~ **40 C.F.R. 60 Subpart IIII compliance plan no less than 90 days before operation as required in AQ-123. If the district does not act to approve, reject, or request additional information within thirty (30) days of receipt of the plan submitted by the permittee, the plan shall be considered to be approved by the district.**

OPERATIONAL CONDITIONS

Engines S-1 through S-10

AQ-121126 In the event of an excess emission incident, regardless of the cause, the permittee shall immediately take corrective action to minimize the release of excess emissions. Notice shall be provided to the NCUAQMD as indicated in the Reporting and Recordkeeping section of this permit. For purposes of compliance with this condition, excess emissions shall mean discharge of pollutants in quantities which exceed those authorized by Federal, State, NCUAQMD Rules, and this permit. [40 C.F.R. 70.6(a)(3)(iii)(B); NCUAQMD Rule 105 §5.0.]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-122127 All equipment listed in Table 1.0 Authorized Emission Devices and ~~2-01.1~~ **2-01.1** Authorized Control Devices shall be operated and maintained by the permittee in accordance with manufacturer's specifications for optimum performance; and in a manner so as to minimize emissions of air contaminants into the atmosphere. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-123128 The permittee shall implement and maintain a written Startup, Shutdown, and Malfunction plan as described in 40 C.F.R. 63.6(e) (3) which contains specific procedures for maintaining the reciprocating engines S-1 through S-12, their associated control devices, their associated CEMS, sensors, measuring devices, and their associated exhaust gas duct work, during periods of startup, shutdown, and malfunction. The plan must clearly describe the startup and shutdown sequence procedure for each unit. The plan shall also include a specific program of corrective actions to be implemented in the event of a malfunction in either the process or control systems. Modifications to the plan are subject to APCO approval and the permittee shall not operate the reciprocating engines S-1 through S-12 and their associated control devices unless a NCUAQMD approved Startup, Shutdown, and Malfunction plan is in effect. The plan shall be submitted to the NCUAQMD not less than thirty (30) calendar days prior to the commissioning period for any of reciprocating engines S-1 through S-10. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the startup, shutdown, and malfunction plan at least 30 days prior to the commissioning period. **If the district does not act to approve, reject, or request additional information within thirty (30) days of receipt of the plan submitted by the permittee, the plan shall be considered to be approved by the district.**

AQ-124129 The permittee shall develop, implement and maintain a written Device Operational Plan that contains specific procedures for operating the reciprocating engines S-1 through S-12, their associated control devices, their associated CEMS, sensors, measuring devices, and their associated exhaust gas duct work under the varying load conditions which may occur during normal modes of operation. The plan shall also include specific protocols to be followed when transitioning between modes of operation. This plan shall be consistent with the requirements of this permit, and all local, state and federal laws, rules, and Regulations. The plan shall include, but not be limited to, daily system integrity inspections and the recording of operational parameters. The plan shall be submitted to the NCUAQMD not more than sixty (~~30~~**60**) calendar days following expiration of the commissioning period for any of reciprocating engines S-1 through S-10. The plan is subject to APCO approval. The permittee shall not operate the reciprocating engines S-1 through S-12 and their associated control devices, after the expiration of the commissioning period for any of the reciprocating engines plus 60 days, unless a NCUAQMD approved Device Operational Plan is in effect. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the Device Operational Plan within ~~30~~**60** days after the commissioning period.

AQ-125130 The permittee shall develop, implement and maintain a written Device Maintenance & Replacement Plan that contains specific procedures for equipment maintenance and identifies replacement intervals for components of the reciprocating engines S-1 through S-12, their associated control devices, their associated CEMS, sensors, measuring devices, and their associated exhaust gas duct work. The plan shall be

submitted to the NCUAQMD not more than thirty (30) calendar days following expiration of the commissioning period for any of reciprocating engines S-1 through S-10. The plan is subject to APCO approval. The permittee shall not operate the reciprocating engines S-1 through S-12 and their associated control devices, after the expiration of the commissioning period for any of the reciprocating engines plus 60 days, unless a NCUAQMD approved Device Maintenance & Replacement Plan is in effect. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO for approval the device maintenance and replacement plan within 30 days after the commissioning period.

AQ-126131 The permittee shall only operate the Reciprocating engines S-1 through S-10 in natural gas mode except during the commissioning period, during maintenance and testing, and during natural gas curtailments as set forth in this permit. [NCUAQMD Rule 102 §5.0]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-127132 The permittee shall not operate reciprocating engines S-1 through S-10 such that startup periods exceed 60 minutes in length. **This limitation shall not apply during the commissioning period.** [NCUAQMD Rule 102 §5.0]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-128133 The permittee shall not operate reciprocating engines S-1 through S-10 such that shutdown periods exceed 30 minutes in length. **This limitation shall not apply during the commissioning period.** [NCUAQMD Rule 102 §5.0]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-129134 The permittee shall not operate the reciprocating engines S-1 through S-10 such that the combined hours of operation during startup and shutdown periods exceeds 30 engine-hours per day. **This limitation shall not apply during the commissioning period.** [NCUAQMD Rule 102 §5.0]

Verification: A summary of **combined engine-hours of operation during startup and shutdown periods** ~~significant operation and maintenance events and monitoring records~~ required shall be included in the semi-annual operational report (AQ-SC9).

AQ-130135 The permittee shall not operate the reciprocating engines S-1 through S-10 such that the combined hours of operation during startup and shutdown periods exceeds 3,650 engine-hours per calendar year. Of the 3,650 engine hours available, the hours of operation during startup and shutdown periods in diesel mode shall not exceed 500 engine-hours per calendar year. **For the purpose of determining compliance with this condition, startup and shutdown periods during the commissioning period shall not accrue toward these limitations.** [NCUAQMD Rule 102 §5.0]

Verification: A summary of **combined engine-hours of operation during startup and shutdown periods and startup and shutdown periods in diesel mode** ~~significant operation and maintenance events and monitoring records required~~ shall be included in the semi-annual operational report (AQ-SC9).

AQ-131436 The permittee shall not operate any of the reciprocating engines S-1 through S-10 below 50 percent load except during startup and shutdown periods. **This limitation shall not apply during the commissioning period.** [NCUAQMD Rule 102 §5.0]

Verification: A summary of **engine operations below 50 percent load** ~~significant operation and maintenance events and monitoring records required~~ shall be included in the semi-annual operational report (AQ-SC9).

AQ-132437 The permittee shall not operate the reciprocating engines S-1 through S-10 for more than 80 engine-hours per calendar day at loads less than 12.0 MW. **This limitation shall not apply during the commissioning period.** [NCUAQMD Rule 102 §5.0]

Verification: A summary of **total engine-hours per calendar day at loads less than 12.0 MW per engine based on readings taken every 15 minutes** ~~significant operation and maintenance events and monitoring records required~~ shall be included in the semi-annual operational report (AQ-SC9).

AQ-133438 While operating the reciprocating engines S-1 through S-10 in Diesel Mode, the permittee shall fire the engines:

- A. Only with CARB diesel as specified in Table ~~4.2.3~~ **4.2.3** Fuel Specifications for S-1 through S-10;
- B. For no more than 50 hours per year for maintenance and testing per engine; and
- C. Such that the combined engine operating hours do not exceed 1000.0 engine hours per year on a 365 day rolling average basis or the combined engine hours specified in Condition of Certification **PUBLIC HEALTH-1**, whichever is less.

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-134139 For each oxidation catalyst installed, during the performance testing required pursuant to the Testing and Monitoring section of this permit, the permittee shall determine the pressure drop across each catalyst. The permittee shall operate the reciprocating engines S-1 through S-10 such that the pressure drop across the catalyst does not exceed the following acceptable range for any period of time: The acceptable pressure range is two inches of water column (plus or minus 10 percent) deviation from the pressure drop established during performance testing. [40 C.F.R. 63 Subpart ZZZZ]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-135140 The permittee shall not operate reciprocating engines S-1 through S-10 if the inlet temperature of the oxidation catalyst is outside of the acceptable operating range for any period of time. The acceptable operating range of the oxidation catalyst is greater than or equal to 450 °F and less than or equal to 1350 °F. Each reciprocating engine is paired with a single oxidation catalyst unit. For purposes of compliance with this condition, each engine and catalyst pair is evaluated separately. This Condition does not apply during startup or shutdown periods, during the commissioning period, or during malfunctions. [40 C.F.R. 63 Subpart ZZZZ]

Verification: A summary of significant operation and maintenance events and monitoring records required (**AQ-146151**) shall be included in the semi-annual operational report (**AQ-SC9**).

AQ-136141 The permittee shall not operate reciprocating engines S-1 through S-10 unless the CO emissions from the units are abated by the oxidation catalyst at a rate greater than or equal to 70 percent over uncontrolled emission levels, calculated on a 3 hour rolling average. Verification of the emissions reduction shall be completed in accordance with 40 C.F.R. 63 Subpart ZZZZ. This Condition does not apply during startup or shutdown periods, during the commissioning period, or during malfunctions. [40 C.F.R. 63 Subpart ZZZZ]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (**AQ-SC9**).

Engines S-11 and S-12

AQ-137142 The permittee shall not operate the reciprocating engines S-11 and S-12, for the purpose of maintenance and testing, in excess of the hour limits listed in Table 6.40 below [NCUAQMD Rule 102 §5.0]:

Table 6.40
S-11 and S-12 Hourly Operating Limits

Device	Daily	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
S-11	1	12	12	13	13
S-12	1	12	12	13	13

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (**AQ-SC9**).

AQ-138143 The permittee shall not operate the reciprocating engines S-11 and S-12, for the purpose of maintenance and testing, within the same 24 hour period. [NCUAQMD Rule 102 §5.0]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (**AQ-SC9**).

AQ-139144 The permittee shall not operate the reciprocating engines S-11 and S-12, for the purpose of maintenance and testing, when any of the reciprocating engines S-1 through S-10 are operating in diesel mode. [NCUAQMD Rule 102 §5.0]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-140145 The permittee shall not operate reciprocating engine S-11, for the purpose of maintenance and testing, for more than 45 minutes in any 60 minute period. [NCUAQMD Rule 102 §5.0]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

REPORTING & RECORDKEEPING

AQ-141146 The permittee shall report all occurrences of breakdowns of the equipment listed in Table 1.0 Authorized Emission Devices or Table ~~1.12-0~~ Authorized Control Devices which result in the release of emissions in excess of the limits identified in this permit. Said report shall be submitted to the NCUAQMD in accordance with the timing requirements of NCUAQMD Rule 105 §5.0.

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-142147 The permittee shall record the following information in the event of an equipment breakdown or malfunction: date and time of event; event duration; description of event; identification of the cause of the event; identify what corrective measures were taken and, if unsuccessful, what additional measures should be taken in the future; and quantification of excess emissions released during the event. The permittee shall maintain this information in a Breakdown log that describes the breakdown or malfunction, includes the date and time of the malfunction, the cause of the malfunction, corrective actions taken to minimize emissions and the date and time when the malfunction was corrected. [NCUAQMD Rule 102 §5.0] **[District Rule 105 §5.0]**

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-143148 The permittee shall immediately record the following information when an event occurs where emissions from the equipment listed in Table 1.0 Authorized Emission Devices are in excess of any limits incorporated within this permit:

- A. Date and time of the excess emission event
- B. Duration of the excess emission event
- C. Description of the condition or circumstance causing or contributing to the excess emission event

- D. Emission unit or control device or monitor affected
- E. Estimation of the quantity and type of pollutants released
- F. Description of corrective action taken
- G. Actions taken to prevent reoccurrence of excess emission event.

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-144149 The permittee shall provide to the NCUAQMD, a completed “Compliance Certification” form signed by the facility’s responsible official which certifies the compliance status of the facility twice per calendar year. The compliance certification form must be submitted to the NCUAQMD according to the following schedule: The semiannual certification (covering quarters 1 and 2) must be submitted prior to July 31st of the reporting year; and the annual certification (covering quarters 1, 2, 3, and 4) prior to March 1st of the following calendar year. The content of the **annual** certification shall include copies of the records designated in Table 7.0 to be kept “annually”.

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-145150 The permittee shall maintain a ~~monthly~~ log of usage for the Emergency IC Diesel Generators S-11 and S-12 in accordance with applicable Reporting Requirements for Emergency Standby Engines, Item (e)(4)(I) of Section 93115, Title 17, California Code of Regulations, Air Toxic Control Measure (ATCM) for Stationary Compression Ignition (CI) engines. The ~~monthly~~ log of usage shall list and document the nature of use for each **operational event category listed below** of the following by recording the **beginning and ending** hour meter readings **and time of day of** ~~for~~ each operational event:

- A. Emergency use hours of operation;
- B. Maintenance and testing hours of operation (e.g., load testing, weekly testing, rolling blackout, general power outage, etc);
- C. Hours of operation for emission testing to show compliance with §93115(e)(2)(A)3 and (e)(2)(B)3 of the ATCM;
- D. Hours of operation to comply with requirements of NFPA 25;
- E. Hours of operation for all other uses other than those specified in Section (e)(2)(A)3 and (e)(2)(B)3 of the ATCM;

- F. Fuel used through the retention of fuel purchase records that account for all fuel used in the engine and all fuel purchased for use in the engine, and, at a minimum, contain the following information for each individual fuel purchase transaction:
1. Identification of the fuel purchased as either CARB diesel, or an alternative diesel fuel that meets the requirements of the verification procedure;
 2. Sulfur content of the fuel;
 3. Amount of fuel purchased;
 4. Date when the fuel was purchased;
 5. Signature of owner or operator or representative of permittee who received the fuel; and
 6. Signature of fuel provider indicating fuel was delivered.

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-146151 The permittee shall continuously maintain onsite for the most recent five year period and shall be made available to the NCUAQMD APCO upon request, the records as listed in Table 7.0 below.

**Table 7.0
Required Records for Engines S-1 through S-10**

Frequency	Information to be Recorded
Upon Occurrence	A. Records of maintenance conducted on engines (40 C.F.R. 60 Subpart III) B. Time, duration, and fuel firing mode for each engine startup C. Time, duration, and fuel firing mode for each engine shutdown D. Time, duration, and reason for each period of operation in diesel mode E. For each bulk delivery of diesel fuel received, certification from the supplier that the diesel fuel meets or exceeds CARB diesel specifications F. For each bulk delivery of diesel fuel received, the higher heating value (HHV) and sulfur content of the fuel G. Fuel Mode – each operating minute shall be designated as either “natural gas” or “diesel mode”
At least one electronic reading every 15 minutes	A. NOx (ppmvd @15% O ₂) B. CO (ppmvd @15% O ₂) C. O ₂ (%) D. Exhaust gas temperature as SCR inlet (°F) E. Exhaust gas temperature at OC inlet (°F) F. Engine load (%)
Hourly (for each	A. NOx (ppmvd @15% O ₂) and lb/hr, on a rolling 31 3 hour average B. CO (ppmvd @15% O ₂) and lb/hr, on a rolling 3 hour average

Frequency	Information to be Recorded
engine)	C. ROC (ppmvd @15% O ₂) and lb/hr, on a rolling 3 hour average D. NH ₃ (ppmvd @15% O ₂) and lb/hr, on a rolling 3 hour average E. SO _x (ppmvd @15% O ₂) and lb/hr, on a rolling 3 hour average F. Natural gas fuel consumption (MMBtu HHV, 3-hr rolling hourly average) G. Diesel fuel consumption during diesel mode (MMBtu HHV, 3-hr rolling hourly average) H. Volumetric proportion of natural gas to diesel pilot injection when operating in natural gas mode
Daily	A. NO _x (lbs/day, total for all engines) B. CO (lbs/day, total for all engines) C. ROC (lbs/day, total for all engines) D. SO _x (lbs/day, total for all engines) E. PM (lbs/day, total for all engines) F. Diesel particulate matter (lbs/day, total for all engines) G. Natural gas fuel consumption (MMBtu HHV, and cubic feet for each engine and total for all engines) H. Diesel pilot fuel consumption (MMBtu HHV, all engines combined) I. Diesel fuel consumption during diesel mode (MMBtu HHV, and gallons for each engine and total for all engines) J. Engine load (% load on a 24 hour average for each engine and total for all engines) K. Hours of operation (each engine and total for all engines as a sum of operating minutes) L. Quantity of fuel combusted (therms and gallons for each engine and total for all engines)
Monthly	A. Sulfur content of natural gas (gr/100scf, monthly fuel testing) B. Natural gas sulfur content (gr/100scf, 12 month rolling average)
Quarterly (combined total for all engines)	A. NO _x (tons) B. CO (tons) C. SO _x (tons) D. ROC(tons) E. PM (tons) F. Diesel particulate matter (tons) G. Natural gas fuel consumption (MMBtu HHV, and cubic feet) H. Diesel pilot fuel consumption (MMBtu HHV, and gallons) I. Diesel fuel consumption during diesel mode (MMBtu HHV, and gallons) J. Sulfur content of natural gas (gr/100scf, 12 month rolling average) K. Hours of operation (for each fuel mode)

Frequency	Information to be Recorded
Annually (combined total for all engines)	L. Quantity of fuel combusted (therms, gallons) A. NOx (tons) B. CO (tons) C. SOx (tons) D. ROC(tons) E. PM (tons) F. Diesel particulate matter (tons) G. Natural gas fuel consumption (MMBtu HHV) H. Diesel pilot fuel consumption (MMBtu HHV) I. Diesel fuel consumption during diesel mode (MMBtu HHV, and gallons) J. Sulfur content of natural gas (gr/100scf, annual average) K. Hours of operation (for each fuel mode) L. Quantity of fuel combusted (therms, gallons)

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

AQ-147152 For each Quarter, the permittee shall submit a written report to the APCO detailing the following items for the operation of the CEMS. The report shall conform to the requirements of NCUAQMD Rules and Regulations Appendix B, Section 2.2, and shall be submitted within 30 days of the end of the quarter.

- A. Time intervals;
- B. Date and magnitude of excess emissions;
- C. Nature and cause of excess (if known);
- D. Corrective actions taken and preventive measures adopted;
- E. Averaging period used for data reporting shall correspond to the averaging period for each respective emission standard;
- F. Applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and
- G. A negative declaration when no excess emissions occurred.

Verification: The project owner shall submit to the CPM and APCO quarterly monitoring reports that include updates to the semi-annual monitoring results (AQ-SC9).

AQ-148153 The permittee shall provide notification and record keeping as required pursuant to 40 C.F.R., Part 60, Subpart A, 60.7.

Verification: No verification needed.

AQ-149154 The permittee shall annually prepare and submit a comprehensive facility wide emission inventory report for all criteria pollutants and toxic air contaminants emitted from the facility. The inventory and report shall be prepared in accordance with the most recent version of the CAPCOA / CARB reference document *Emission Inventory Criteria Guidelines*. The inventory report shall be submitted to the NCUAQMD APCO no later than March 1st of the following calendar year. The inventory report is subject to NCUAQMD APCO approval. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to the CPM and APCO the annual operational reports that include monitoring and compliance results (**AQ-SC9** and **AQ-1520**).

AQ-150155 The permittee shall submit ~~the~~ **a** health risk assessment protocol to the NCUAQMD APCO for review no later than 9 months after the Commissioning Period for the reciprocating engines S-1 through S-10 has concluded. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to both the district and CPM for approval the health risk assessment protocol within 9 months after the commissioning period.

AQ-151156 No later than **120 days** ~~14 months~~ after the ~~Commissioning Period for reciprocating engines S-1 through S-10 has concluded~~ **health risk assessment protocol required pursuant to this section has been approved by the APCO**, the permittee shall submit to the NCUAQMD APCO a ~~revised~~ health risk assessment. ~~The health risk assessment shall be prepared pursuant to an~~ **the** NCUAQMD APCO approved protocol based upon ~~CARB and California Office of Health and Hazard Assessment guidance documents~~. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit to both the district and CPM the revised health risk assessment within **120 days of the protocol being approved** ~~14 months after the commissioning period~~.

AQ-152157 Not later than 24 hours after determining that diesel mode operation is to occur as a result of an expected natural gas curtailment, the permittee shall notify the APCO by telephone, email, electronic page, or facsimile. The notification shall include, but not be limited to, the following [NCUAQMD Rule 102 §5.0]:

- A. The anticipated start time and duration of operation in diesel mode under the natural gas curtailment; and
- B. The anticipated quantity of diesel fuel expected to be burned under the natural gas curtailment.

Verification: The project owner shall submit to both the district and CPM the notification within 24 hours after determining that diesel mode operation is to occur.

AQ-153158 Not later than 24 hours following the end of a period of any diesel mode operation, the permittee shall notify the APCO by email or facsimile of the following [NCUAQMD Rule 102 §5.0]:

- A. The actual start time and end time of the period of diesel mode operation;
- B. The identification of the reciprocating engines that were operated and the average load at which each reciprocating engine was operated on diesel fuel during the diesel mode operating period; and
- C. The actual quantity of diesel fuel consumed during the diesel mode operation.

Verification: The project owner shall submit to both the district and CPM the notification within 24 hours after the end of diesel mode operation.

TESTING & COMPLIANCE MONITORING

AQ-154159 The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment **for reciprocating engines S-1 through S-10** in accordance with the procedures and guidance specified in 40 C.F.R. Part 60, Appendix F.

Verification: No verification needed.

AQ-155160 The permittee shall monitor and record exhaust gas temperature at the inlet and at the outlet of the oxidation catalyst. [40 C.F.R. 63 Subpart ZZZZ]

Verification: A summary of significant operation and maintenance events and monitoring records required (**AQ-146151**) shall be included in the semi-annual operational report (**AQ-SC9**).

AQ-156161 Not less than thirty days prior to the date of any source test required by this permit, the permittee shall provide the NCUAQMD APCO with written notice of the planned date of the test and a copy of the source test protocol.

Verification: The project owner shall submit the proposed protocol for the source tests 30 days prior to the proposed source test date to both the district and CPM for approval.

AQ-157162 Source test results shall be summarized in a written report and submitted to the NCUAQMD APCO directly from the independent source testing firm on the same day, the same time, and in the same manner as submitted to permittee. Source Test results shall be submitted to the NCUAQMD APCO no later than 60 days after the testing is completed.

Verification: The project owner shall submit source test results no later than 60 days following the source test date to both the district and CPM.

AQ-158163 The permittee shall demonstrate compliance with all the emission limits identified in this permit **during-prior to the end of** the commissioning period of each of the reciprocating engines S-1 through S-10 using the following methods. Testing shall be conducted both while the engines are operated in natural gas mode and while operated in diesel mode. All compliance tests shall be conducted at 50 percent, 75 percent, and

95 percent or greater of the operating capacity of each reciprocating engine. Alternative test methods may be approved by the APCO.

- A. Particulate matter – CARB Method 5 (front and back half) or EPA Methods 201a and 202.
- B. Diesel particulate matter – CARB Method 5 (front half).
- C. Visible emissions.
 - 1. Permittee shall perform a “Visible Emission Evaluation” (VEE) concurrent with particulate matter testing. A CARB certified contractor shall perform such an evaluation.
- D. Ammonia – Bay Area Air Quality Management **District Source Test Procedure** NCUAQMD ST-1B.
- E. Reactive organic gases – CARB Method 100.
- F. Nitrogen oxides – CARB Method 100.
- G. Carbon monoxide – CARB Method 100 & ASTM D6522-00 [NESHAP ZZZZ].
- H. Oxygen – CARB Method 100 & ASTM D6522-00 [NESHAP ZZZZ].
 - 1. Oxygen shall be measured at the inlet and outlet of the oxidation catalyst.
 - 2. Oxygen measurements shall be made at the same time as the CO measurements.
 - 3. Pressure drop measurements across the catalyst shall be made at the same time as the CO measurements.
- I. Natural gas fuel sulfur content – ASTM D3246.
- J. Liquid fuel sulfur content – ASTM D5453-93.

Verification: The project owner shall submit the proposed protocol for the source tests 30 days prior to the proposed source test date to both the district and CPM for approval. The project owner shall notify the district and CPM no later than 7 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the district and CPM.

AQ-159164 The permittee shall demonstrate compliance with all the emission limits identified in this permit for the reciprocating engines S-1 through S-10 once per calendar year unless indicated below, using the following methods. **For purposes of compliance with this condition,** ~~Except as provided in Condition #123,~~ testing shall be conducted while the engines are operated in natural gas mode. All compliance tests shall be conducted at an operating capacity of 50 percent, 75 percent, or 95 percent or greater

during the testing of each reciprocating engine. Alternative test methods may be approved by the APCO. [NCUAQMD Rule 102 §5.0]

A. Particulate matter – CARB Method 5 (front and back half) or EPA Methods 201a and 202.

~~B. Diesel Particulate Matter – CARB Method 5 (front half).~~

BC. Visible emissions - Permittee shall perform a “Visible Emission Evaluation” (VEE) concurrent with particulate matter testing. A CARB certified contractor shall perform such an evaluation.

CD. Ammonia – Bay Area Air Quality Management **District Source Test Procedure** NCUAQMD ST-1B.

DE. Reactive organic gases – CARB Method 100.

EF. Nitrogen oxides – CARB Method 100.

FG. Carbon monoxide – CARB Method 100.

GH. Oxygen – CARB Method 100.

1. Oxygen shall be measured at the inlet and outlet of the oxidation catalyst.
2. Oxygen measurements shall be made at the same time as the CO measurements.
3. Pressure drop measurements across the catalyst shall be made at the same time as the CO measurements.

HI. Natural gas fuel sulfur content – ASTM D3246.

~~J. Liquid Fuel Sulfur Content – ASTM D5453-93.~~

Verification: The project owner shall submit the proposed protocol for the source tests 30 days prior to the proposed source test date to both the district and CPM for approval. The project owner shall notify the district and CPM no later than 7 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the district and CPM.

AQ-160165 The engines shall be tested on a rotating basis with all of the engines to be tested in natural gas mode each year and all engines tested at the three different load values at least once every three years; and that each engine is tested at a different load each year. Each engine shall be tested, at the following loads (50 percent, 75 percent, ≥95 percent) or under conditions determined by the APCO to most challenge the emission control equipment. The APCO may waive some or all of the testing requirements if the results of previous compliance tests have demonstrated compliance with permitted emission limits by a sufficient margin. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit the proposed protocol for the source tests to both the district and CPM for approval in accordance with condition **AQ-159164**.

AQ-161 **Prior to the end of the commissioning period, the permittee shall conduct district-approved source testing on each of the reciprocating engines S-1 through S-10 to determine the maximum allowable ammonia (NH₃) injection rate necessary to demonstrate compliance with the ammonia slip limits in the Pollutant Limitations section of this permit. Each test shall be conducted over the expected operating range of the engines (including, but not limited to, 50%, 75% and 95% and greater loads) to establish the range of ammonia injection rates necessary to achieve NOx emission reductions while maintaining ammonia slip to acceptable levels. Compliance with the ammonia slip limits in the Pollutant Limitations section of this permit shall be demonstrated through calculations of corrected ammonia concentrations based upon the source test correlations and continuous records of ammonia injection rates. The source tests shall determine the correlation between measured parameters, which shall include, but need not be limited to: engine heat input rate, ammonia injection rate, NOx concentration upstream and downstream of the SCR catalyst, and the corresponding NH₃ ammonia concentration at the point of discharge (exhaust stack).**

Verification: **The project owner shall submit the proposed protocol for the source tests to both the district and CPM for approval in accordance with Condition AQ-156. The project owner shall submit to the CPM and APCO the annual operational reports that include monitoring and compliance results (AQ-SC9 and AQ-15).**

AQ-162166 Permittee shall demonstrate compliance with permitted emission limits for Engines S-1 through S-10 while operating in diesel mode once every three years or following each 200 hours of operation of an individual engine in diesel mode whichever is sooner. Compliance shall be demonstrated as indicated below using the following methods. All compliance tests shall be conducted while an engine is operated in diesel mode at 50 percent, 75 percent or 95 percent or greater operating capacity of each engine; or under conditions determined by the APCO to most challenge the emission control equipment. Alternative test methods may be approved by the APCO [NCUAQMD Rule 102 §5.0]:

- A. Particulate matter - CARB Method 5 (front and back half), or EPA Methods 201a and 202.
- B. Diesel particulate matter – CARB Method 5 (front half only).
- C. Visible emissions - U.S. EPA Method 9.
- D. Ammonia – Bay Area Air Quality Management **District Source Test Procedure NCUAQMD ST-1B**.
- E. Reactive organic gases – ARB Method 100.

F. Nitrogen oxides -- ARB Method 100.

G. Carbon monoxide – ARB Method 100.

1. CO shall be measured at the inlet and outlet of the oxidation catalyst.

H. Oxygen – ARB Method 100.

1. Oxygen shall be measured at the inlet and outlet of the oxidation catalyst.
2. Oxygen measurements shall be made at the same time as the CO measurements.

I. Liquid fuel sulfur content – ASTM D5453-93.

Verification: The project owner shall submit the proposed protocol for the source tests 30 days prior to the proposed source test date to both the district and CPM for approval. The project owner shall notify the district and CPM no later than 7 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the district and CPM.

AQ-163167 The engines shall be tested at various loads (50 percent, 75 percent, ≥ 95 percent) on a rotating basis, with one-third of the engines to be tested in diesel mode in each year; and tested at each of the three loads. The APCO may waive some or all of the testing requirements if the results of previous compliance tests have demonstrated compliance with permitted emission limits by a sufficient margin. The engines shall be tested on a rotating basis with all engines tested at the three different load values at least once every nine years; and that each engine is tested at a different load each rotation. [NCUAQMD Rule 102 §5.0]

Verification: The project owner shall submit the proposed protocol for the source tests to both the district and CPM for approval in accordance with condition **AQ-162166**.

AQ-164168 The permittee shall demonstrate compliance with the hourly, daily, and annual ROC emission limits through the use of valid CO CEM data and the ROC/CO relationship determined by annual CO and ROC source tests; and APCO approved emission factors and methodology. [40 C.F.R. 63 Subpart ZZZZ; NCUAQMD Rule 102 §5.0]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (**AQ-SC9**).

AQ-165169 The permittee shall demonstrate compliance with the hourly, daily, and annual SO_x emission limits through the use of valid fuel use records, natural gas sulfur content, diesel fuel sulfur content, mass balance calculations; and APCO approved emission factors and methodology. The natural gas sulfur content shall be determined on a monthly basis using ASTM D3246. [NCUAQMD Rule 102 §5.0, PSD]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (**AQ-SC9**).

AQ-166170 The permittee shall demonstrate compliance with the hourly, daily, and annual PM emission limits, and the diesel particulate matter emission limits, through the use of valid fuel use records, source tests, and APCO approved emission factors and methodology. [NCUAQMD Rule 102 §5.0, PSD]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-167171 Relative accuracy test audits (RATAs) shall be performed on each CEMS **for reciprocating engines S-1 through S-10** at least once every twelve months, in accordance with the requirements of 40 C.F.R. 60, Appendix B. Calibration Gas Audits of continuous emission monitors **for reciprocating engines S-1 through S-10** shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The NCUAQMD shall be notified in writing at least 30 days in advance of the scheduled date of the audits. Audit reports shall be submitted along with quarterly compliance reports to the NCUAQMD within 60 days after the testing was performed.

Verification: The project owner shall submit to the CPM and APCO quarterly results of relative accuracy test audits (RATAs) as updates to the semi-annual monitoring results (AQ-SC9).

LOCAL ENFORCEABLE ONLY, EQUIPMENT-SPECIFIC REQUIREMENTS

FUEL USAGE

AQ-168172 The Emergency IC Diesel Generators S-11 and S-12 shall use one of the following fuels:

- A. CARB diesel fuel, or
- B. An alternative diesel fuel that meets the requirements of the verification procedure (as codified in Cal. Code Regs., tit. 13 §2700-2710), or
- C. CARB diesel fuel used with fuel additives that meets the requirements of the verification procedure (as codified in Cal. Code Regs., tit. 13 §2700-2710), or
- D. Any combination of a) through d) above.

Verification: The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

EMISSIONS

AQ-169173 The permittee shall not discharge diesel particulate matter from reciprocating engines S-1 through S-10 while operating in diesel mode such that emissions of diesel particulate matter exceed 0.15 g/bhp-hr. [Cal. Code Regs., tit. 17 §93115.]

Verification: The project owner shall submit the results of source tests to both the district and CPM in accordance with condition **AQ-162166**.

OPERATIONAL CONDITIONS

AQ-170174 While operating the reciprocating engines S-1 through S-10 in diesel mode, the permittee shall fire the engines for no more than 50 hours per year for each engine for maintenance and testing. [Cal. Code Regs., tit. 17 §93115.]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AQ-171175 The Emergency IC Diesel Generators S-11 and S-12 are authorized the following maximum allowable annual hours of operation as listed in Table 68.0 below [Cal. Code Regs., tit. 17 §93115]:

**Table 68.0
Hours of Operation for Emergency IC Diesel Generators S-11 & S-12**

Emergency Use	Non-Emergency Use	
	Emission Testing to Show Compliance	Maintenance & Testing
Not Limited by the ATCM	Not Limited by the ATCM	50 hours/year

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

AMBIENT MONITORING

AQ-172176 ~~The No later than 180 days after construction of the equipment authorized pursuant to this permit begins, and concurrent with the commencement of operation, the~~ permittee shall provide full funding for the purchase and installation of a new monitoring station (Shelter; CO, NOx, PM10/PM2.5, and other sampling equipment as determined by the APCO) to be installed at a location approved by the APCO. The funding shall include all costs associated with the purchase, installation, operation and maintenance (including personnel costs) of the monitoring station for an initial period of not less than five (5) years. PG&E shall reimburse the district for costs incurred within 30 days of receiving an invoice from the district. At the conclusion of that period, the APCO may extend the operation of the site if deemed in the best interest of the district, and PG&E will continue to fund all costs associated with its continued operation. The district shall manage the procurement, operation and maintenance of the site, and district staff will be responsible for collecting, securing, and quality assuring all data. [District Rule 102 §5.0]

Verification: The project owner shall certify providing the district full funding for the ambient air quality monitoring station. A copy of ~~the letter certifying funding each payment submitted by the project owner in response to a district invoice~~ shall be submitted to the CPM within 15 days of issuance.

~~AQ-173177~~ **The** ~~No later than 180 days after construction of the equipment authorized pursuant to this permit begins, and concurrent with the commencement of operation, the permittee shall provide full funding for the purchase and installation of a new meteorological monitoring station to be installed at a location approved by the APCO. The funding shall include all costs associated with the purchase, installation, operation and maintenance (including personnel costs) of the meteorological monitoring station for an initial period of not less than five (5) years. PG&E shall reimburse the district for costs incurred within 30 days of receiving an invoice from the district. At the conclusion of that period, the APCO may extend the operation of the site if deemed in the best interest of the district, and PG&E will continue to fund all costs associated with its continued operation. The district shall manage the procurement, operation and maintenance of the site, and district staff will be responsible for collecting, securing, and quality assuring all data. The data collected at the station shall meet the requirements of EPA-454/R-99-005 "Meteorological Monitoring Guidance for Regulatory Modeling Applications" February 2000. [District Rule 102 §5.0]~~

Verification: The project owner shall certify providing the district full funding for the meteorological station. A copy of ~~the letter certifying funding each payment submitted by the project owner in response to a district invoice~~ shall be submitted to the CPM within 15 days of issuance.

PUBLIC HEALTH CONDITIONS OF CERTIFICATION

PUBLIC HEALTH-1 The project owner shall not operate the Wärtsilä engines on diesel fuel for a period exceeding 510 hours per year total for all 10 engines, with the exception of the first year when commissioning and compliance testing is required and the hours may not exceed 650. Once the health risk assessment prepared pursuant to **PUBLIC HEALTH-2** is approved by the CPM, the CPM will notify the project owner of the total number of engine hours on diesel fuel the project may operate annually, as determined by what the health risk assessment shows as the maximum number of hours that achieve a theoretical maximum cancer risk at the point of maximum impact of less than 10 in one million and acute and chronic Hazard Indices of less than 1.0. The CPM may also, based upon the results of the compliance testing and the health risk assessment, allow the use of an emission rate in pounds per year (lbs/yr) of diesel particulate matter as the limitation of operation when on diesel fuel in lieu of hours per year so long as the CPM can verify the emissions on a daily and yearly basis through objective criteria. The 510 total hours of operation for all engines using diesel fuel, and any subsequently adjusted number of hours, shall not include time needed for compliance testing required as per Condition ~~AQ-163167~~ if the testing is conducted when the wind direction is out of the east or south east.

Verification: The project owner shall provide hourly logs of diesel fuel usage to the CPM in the annual compliance report summary. The log shall include the unit number, duration, **and** purpose (annual compliance testing, natural gas curtailment or emergency). **The log shall also include, and wind direction for any hour the project owner is seeking to exclude.**

PUBLIC HEALTH-2 The project owner shall provide the results of a source test using diesel fuel on the number of engine exhaust stacks required below and a human health risk assessment (HRA) to the Compliance Project Manager (CPM). The source test and human health risk assessment shall be conducted according to protocols reviewed and commented on by the North Coast Unified Air Quality Management District and reviewed and approved by the CPM, and **the protocols** shall be submitted to the CPM ~~not less~~ **no later** than 60 days after the date of starting commercial operations. The source test shall be consistent with and conducted at the same time as testing required under Condition of Certification **AQ-163167**. The source test and HRA shall include the quantitative analysis and assessment of the following toxic air contaminants: diesel particulate matter in the exhaust stream both before and after the oxidative catalyst, acetaldehyde, acrolein, benzene, 1, 3-butadiene, ethyl benzene, formaldehyde, propylene, toluene, and xylenes.

The number of engine exhaust stacks to be sampled shall be determined in the following manner:

1. Four (4) engines chosen randomly shall be tested first. If stack testing results for each contaminant described above on all four engines falls within two standard deviations of the arithmetic mean of each individual contaminant, no further engines need be tested.
2. If any contaminants measured in the stack test fall outside two standard deviations of the arithmetic mean for that contaminant, three (3) engines chosen randomly shall be tested for all contaminants that fell outside two standard deviations of the arithmetic mean. If stack testing results for each contaminant described above on all seven engines tested fall within two standard deviations of the arithmetic mean of each individual contaminant, no further engines need be tested. The project owner may request relief from this and further stack testing by providing the CPM a written request with documentation explaining that further testing would not result in a significant change in the health risk assessment results.
3. This process shall be continued until either the results for all engines tested fall within two standard deviations of the arithmetic mean of each individual contaminant for all engines tested or all ten (10) engines are tested.
4. The HRA described above shall be based on all data produced for all engines tested under this protocol.

This source testing shall be repeated three years after the initial source test and again after 10 years of commencing commercial operations.

Verification: **No later** ~~Not less~~ than 60 days after the start of commercial operations, the project owner shall provide a copy of the source test and human health risk assessment protocols

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to the NCUAQMD for review and comment and to the CPM for review and approval. ~~Not less than 30~~ **No later than 60** days after each group of source tests has been completed, the project owner shall provide the source test results to the NCUAQMD and the CPM. When the project owner has fulfilled the requirement for testing ~~as described above~~, the project owner shall submit all test results and the HRA to the NCUAQMD for review and comment and to the CPM for approval within ~~60~~ **90** days of the date of the last test or not later than ~~9 months~~ **270** days after the date of starting commercial operations **for all ten engines**, whichever is sooner.

Source test results from testing performed concurrently with Conditions AQ-159, AQ-160, AQ-162, and AQ-163 may be used to meet the requirements of this condition, provided that the testing includes the quantitative analysis and assessment of toxic air contaminants and diesel particulate matter as required by this condition.

IT IS SO ORDERED.

Date: April 21, 2010

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION



KAREN DOUGLAS
Chairman