

## DOCKETED

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<b>Organization:</b>	DayZen LLC
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**PETITION TO AMEND**

**HUMBOLDT BAY GENERATING  
STATION**

06-AFC-7C

Submitted to the: California

Energy Commission

Submitted by:

**PACIFIC GAS AND ELECTRIC COMPANY  
(PG&E)**

Prepared by:



**JUNE 2016**



June 6, 2016

Bruce Boyer  
Compliance Project Manager  
Siting, Transmission and Environmental Protection Division  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512

**Subject: PACIFIC GAS AND ELECTRIC COMPANY'S PETITION FOR  
AMENDMENT  
HUMBOLDT BAY GENERATING STATION  
DOCKET NO. (06-AFC-7C)**

Dear Mr. Boyer,

On behalf of Pacific Gas and Electric Company (PG&E) DayZen LLC hereby submits the Petition for Amendment (Petition) for Humboldt Bay Generating Station (06-AFC-7C) (HBGS) to conform the Air Quality Conditions of Certification to a recent amendment to the Title V Operating Permit (PTO) issued by the North Coast Unified Air Quality Management District (District) for the HBGS. The associated Amendment Fee of \$5,000.00 will be submitted under separate cover.

I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge. I also certify that I am authorized by PG&E to submit this Petition for Amendment.

Sincerely,

A handwritten signature in blue ink that reads "Scott A. Galati".

Scott A. Galati  
Counsel to PG&E

## **Section 1 INTRODUCTION**

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### **1.1 INTRODUCTION TO PETITION**

Pacific Gas & Electric Company (PG&E) files this Petition To Amend (Petition) with the California Energy Commission (Commission) to conform the Air Quality Conditions of Certification to a recent amendment to the Title V Operating Permit (PTO) issued by the North Coast Unified Air Quality Management District (District) for the Humboldt Bay Generating Station (HBGS). This Petition is filed pursuant to Section 1729 of the Commission Regulations.

### **1.2 FINAL DECISION BACKGROUND**

On September 24, 2008, the Commission issued a Final Decision to authorize the construction and operation of the Humboldt Bay Repowering Project, now known as the Humboldt Bay Generating Station (HBGS)<sup>1</sup>. On April 30, 2009, PG&E filed a Petition To Amend to reflect modifications to the Air Quality and Public Health Conditions of Certification necessary to conform them to those conditions contained in the Final Authority To Construct/Permit To Operate issued by the District on February 8, 2010. The Commission approved the Petition To Amend on April 21, 2010<sup>2</sup>. The approval of the April 30, 2009 Petition To Amend included various modifications to Air Quality Conditions of the Certification. Therefore, the current complete set of Air Quality Conditions of Certification applicable to the HBGS are contained in the Final Decision and the April 21, 2010 Commission Order as amended by the approval of the April 30, 2009 Petition To Amend.

### **1.3 PURPOSE AND NEED FOR AMENDMENT**

In accordance with existing air quality rules and regulations, the District issued the PTO to the HBGS, dated February 17, 2016<sup>3</sup>. The PTO contains modifications to the current set of Air Quality Conditions of Certification. The purpose of this Petition is to align the Commission's Air Quality Conditions of Certification with the District PTO.

### **1.4 INFORMATION NOT KNOWN AT TIME OF FINAL DECISION**

The information contained in this Petition could not have been known at the time of the Final Decision because the District issued the PTO several years after the Final Decision.

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<sup>1</sup> Final Decision for the Humboldt Bay Repowering Project, 06-AFC-07, Order 08-0924-5, September 24, 2008.

<sup>2</sup> Order Approving Petition To Amend, Order 10-0421-3, April 21, 2010.

<sup>3</sup> Title V Operating Permit and District Permit To Operate, Permit Number NCU 059-12, dated February 17, 2016.

## **1.5 MODIFICATIONS DO NOT UNDERMINE FINAL DECISION**

The modifications do not undermine the final decision. Of the large number of changes, most are administrative in nature . The following changes are substantive:

- An increase in the pilot heat limit from 0.8 MMBtu/hour to 2.0 MMBtu/hour. This will allow the units to run more dependably, with fewer trips to diesel. This will also correct a problem by avoiding forcing a unit out due to “noise” in the flow meters. This increase in pilot heat results in an increase in the allowable diesel usage per day; however, no associated emissions limits have been increased. Although the pilot heat is increasing, the total allowable heat input (natural gas heat input plus pilot fuel heat input) is remaining the same (144.7 MMBtu/hour).
- The emission rate for PM10 for each engine, while operating in diesel mode, was decreased from 10.8 lb/hour to 5.5 lb/hour. This change will allow HBGS, if needed, to run all 10 units in diesel mode for 24 hours per day without exceeding our total combined 24-hour limit for PM10 for all 10 engines.
- Diesel source testing has been reduced from a 3-year testing cycle (three engines at three loads each per year, totaling 9 diesel source tests a year) to a 15-year testing cycle (two engines tested at one load each per year, totaling 2 diesel source tests per year). Historically, one of the largest uses of diesel fuel was a result of the annual source testing in diesel mode.

Although the pilot heat was increased, the reduction in diesel source testing should result in a significant reduction in the total amount of diesel fuel burned per year. These modifications do not change or undermine any of the assumptions, rationale, findings, or other bases of the Final Decision.

## **1.6 NO ENVIRONMENTAL IMPACTS**

The proposed modifications do not increase any emission standard above what was previously analyzed in the Final Decision or any amendments thereto and therefore would not result in any new or different environmental impacts.

## **1.7 COMPLIANCE WITH LORS**

The purpose of this Petition is to align the CEC Conditions of Certification with the modified conditions of the PTO. There are no new laws, ordinances, regulations or standards (LORS) that are applicable to the subject matter of this Petition.

## **1.8 EFFECT ON PUBLIC**

The modifications proposed in this Petition will have no effect on the public as they do not result in any new environmental impacts.

## **1.9 PROPERTY OWNERS**

The list of property owners is the same as those used during the original licensing proceeding. Since the modifications proposed in this Petition will not result in any new environmental impacts this Petition will have no effects on property owners.

## **1.10 SCOPE OF ANALYSIS**

Pursuant to Section 1769 of the Commission Regulations and Condition of Certification AQ-SC6, this Petition includes a description of each requested modification to the existing Air Quality Conditions of Certification. Since all of the proposed revisions do not involve changes in emissions or operating conditions of the CGS, no environmental analysis is required. Section 2 provides a description of each proposed modifications to the Air Quality Conditions or Certification.

## Section 2 DESCRIPTION OF MODIFICATIONS

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This section provides proposed modifications to the Air Quality Conditions of Certification to align them with the District PTO. A brief description of each modification and the revisions to the condition requested are shown using the convention of **underline** for additions and **strikethrough** for deletions<sup>4</sup>. For each modification, we have also included a footnote to reference the page number in the PTO where the District condition can be found. In addition, to assist Staff in its analysis a complete set of the Air Quality Conditions of Certification with the proposed modifications identified using the Microsoft Word “track changes” function are included in Appendix A of the PTA and will also be delivered electronically to the CEC.

### **AQ-1**

The District made an administrative change to **AQ-1** to update the date of issuance of the PTO and to delete reference to the Authority to Construct permit which, according to State and Federal law, is superseded by the PTO. The modifications to **AQ-1** are shown below.

**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~~ 16, 2016 (18 months prior to the expiration date of the Title V permit) and no later than September ~~17, 2012~~ 16, 2017 (6 months prior to the expiration date of the Title V permit). [District Rule 502 §2.2; 40 CFR 70.5(a)(1)(iii)] ~~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 the Rules and Regulations of the North Coast Unified Air Quality Management District.~~<sup>5</sup>

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<sup>4</sup> Since the PTO does not include the Commission Verifications for each Condition of Certification, they are only included where the modification proposed by the District requires a conforming change.

<sup>5</sup> Page 11 Permit To Operate, Condition 1

## AQ-2

The District made an administrative change to **AQ-2** capitalizing “permittee” and including the correct reference to its rules as shown below.

**AQ-2** If modifications to the permit are necessary, the ~~P~~**P**ermittee 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~~**District**. [~~NCUAQMD Rule 102~~] [~~NCUAQMD Reg V Rule 502 §2.3~~]**District Rule 502(B)(3)**; [40 C.F.R. 70.5(a)(1)(ii).]<sup>6</sup>

## AQ-3

The District modified **AQ-3** by adding clarifying language about the timing of submittal of any updates to the Title V application. This administrative change is shown below.

**AQ-3** The ~~P~~**P**ermittee 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~~**later than 30 days after the end of the quarter during which the new requirement takes place** (i.e., every three months). [40 CFR 70.5(b)]<sup>7</sup>

## AQ-4

The District modified **AQ-4** clarifying reporting requirements for discovery of inaccuracies of information submitted to the District. These administrative changes are shown below.

**AQ-4** ~~The permittee 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] Upon the discovery of inaccuracies contained within an application or~~

<sup>6</sup> Page 11 Permit To Operate, Condition 2

<sup>7</sup> Page 11 Permit To Operate, Condition 3

supplement thereto, the Permittee shall immediately notify the APCO. The Permittee shall undertake action to correct the deficiency within the time frame specified by the APCO. [District Rule 502(E)(3); 40 CFR 70.5(a)(2) and (b)]<sup>8</sup>

#### **AQ-5**

The District modified **AQ-5** with the following administrative changes to reference the correct District Rule.

**AQ-5** Upon written request of the Air Pollution Control Officer, the ~~P~~ermittee shall supplement any complete application with additional information within the time frame specified by the ~~APCO~~Air Pollution Control Officer. [~~District Rule 502(E)(3); 40 CFR 70.5(a)(2) and (b)~~NCUAQMD Rule 103 Section 6.0]<sup>9</sup>

#### **AQ-6**

The District slightly modified PTO Permit Conditions 20 and 21 language concerning CEM monitoring and reporting currently contained in Condition of Certification AQ-19 and AQ-20. The modified language is provided below.

~~**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] When submitting an application for a permit pursuant to Regulation V, the Permittee 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<sup>st</sup> through June 30<sup>th</sup> and July 1<sup>st</sup> through December 31<sup>st</sup> of each year; statements on compliance status with any applicable enhanced monitoring; and annual compliance plans, no later than January 30<sup>th</sup> 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. [40 CFR 70.5(c)(9) and (d)]<sup>10</sup>~~

<sup>8</sup> Page 11 Permit to Operate, Condition 4

<sup>9</sup> Page 11 of Permit To Operate, Condition 5

<sup>10</sup> Page 11 of Permit To Operate, Condition 6

## AQ-7

The District made an administrative change to **AQ-7** to include the correct reference to its Rule as shown below.

**AQ-7** The Permittee shall comply with all conditions of the Title V permit. ~~[NCUAQMD Rule 105 [NCUAQMD Rule 504 §2.7.]]~~[District Rule 5004(B)(7)]<sup>11</sup>

## NEW PTO CONDITION 7

The District added a new Condition 7 in the PTO which is reproduced below.

**New Condition 7** 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 District Regulation 5 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 five years. [District Rule 504(K); 40 CFR 70.6(a)(2)]<sup>12</sup>

## AQ-8

The District made administrative changes to **AQ-8** to reference the correct District Rule as shown below.

**AQ-8** This Title V permit may be modified, revoked, reopened, and reissued or terminated for cause. ~~[NCUAQMD Rule 102]~~[District Rule 503(I)]<sup>13</sup>

## AQ-9

The District made the following administrative changes to **AQ-9**.

**AQ-9** The permittee shall furnish to the ~~APCO~~Air Pollution Control Officer, within 10 (ten) days of the request, any information that the Air Pollution Control Officer ~~APCO~~ may request in writing to determine whether cause exists for modifying, revoking and

<sup>11</sup> Page 12 of Permit To Operate, Condition 8

<sup>12</sup> Page 11 of Permit To Operate, Condition 7

<sup>13</sup> Page 12 of Permit to Operate, Condition 10

reissuing, or terminating the permit; or to determine compliance with this ~~Title V Authority to Construct/PSD~~ permit. Upon request, the ~~P~~permittee shall also furnish to the ~~Air Pollution Control Officer~~ ~~APCO~~ copies of records required to be kept by conditions of this permit. For information claimed to be confidential, the ~~P~~permittee may furnish such records ~~directly to the EPA~~ along with a claim of confidentiality. [~~40 CFR 70.6(a)(6)(v)]~~District Rule 103-Section 6~~]<sup>14</sup>~~

### **NEW PTO CONDITION 9**

The District added the following New Condition 9 to reflect and reference District Rule 504(B)(7)(d).

New Condition 9 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. [District Rule 504(B)(7)(d)]<sup>15</sup>

### **AQ-10**

The District made the following minor administrative changes to **AQ-10** to reference the correct District Rule.

**AQ-10** Noncompliance with any federally enforceable requirement in this Title V permit is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of the Title V permit renewal application. [District Rule 504(B)(7)(c)]~~NCUAQMD Rule 102-Section 9~~]<sup>16</sup>

<sup>14</sup> Page 12 of Permit To Operate, Condition 11

<sup>15</sup> Page 12 of Permit To Operate, Condition 9

<sup>16</sup> Page 12 of Permit To Operate, Condition 12

### AQ-11

The District made the following minor administrative changes to **AQ-11** to reference the correct District Rule.

- AQ-11** A pending Title V permit action (e.g. a proposed permit revision) or notification of anticipated noncompliance does not stay any permit condition. [~~District Rule 504(B)(7)(e)]NCUAQMD Rule 102 Section 5.0]<sup>17</sup>~~

### AQ-12

The District made the following minor administrative changes to **AQ-12** to reference the correct District Rule.

- AQ-12** This ~~Authority to Construct/PSD~~Title V permit does not convey any property rights of any sort or any exclusive privilege. [~~District Rule 504(B)(7)(b)]NCUAQMD Rule 102 Section 5.0]<sup>18</sup>~~

### AQ-13

The District made the following minor administrative changes to **AQ-13** to reference the correct District Rule.

- AQ-13** Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the ~~APCO~~Air Pollution Control Officer or an authorized representative to perform all of the following:
- a. Enter upon the stationary source's premises where this source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this ~~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

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<sup>17</sup> Page 12 of Permit To Operate, Condition 13

<sup>18</sup> Page 12 of Permit To Operate, Condition 14

- 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. [~~District NCUAQMD Rule 109 and~~ Rule 504 §2.5]<sup>19</sup>

#### **AQ-14**

The District made the following minor administrative changes to **AQ-14** to reference the correct District Rule.

#### **AQ-14 Monitoring Reports**

- a. The ~~P~~permittee shall submit to the ~~APCO–Air Pollution Control Officer~~ 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<sup>st</sup> through June 30<sup>th</sup> and July 1<sup>st</sup> through December 31<sup>st</sup>. The reports shall be submitted by July 30<sup>th</sup> and March 1<sup>st</sup> of each year respectively.
- c. Any and all instances of deviations from 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. [~~District Rule 502(K) and NCUAQMD Rule 103 Section 6] [NCUAQMD Rule 502 §11 and~~ Rule 504 ~~(E); §5 and ] [40 C.F.R. 70.6(a)(3)(ii) and (iii).]<sup>20</sup>~~

#### **AQ-15**

The District made the following minor administrative changes to **AQ-15** to reference the correct District Rule and to reference the permit as the Title V permit.

#### **AQ-15 Compliance Reports**

- a. The ~~P~~permittee shall submit to the ~~APCO–Air Pollution Control Officer~~ and to U.S. EPA (Air-3, U.S. EPA, Region IX)

<sup>19</sup> Page 12 of Permit To Operate, Condition 15

<sup>20</sup> Page 13 of Permit To Operate, Condition 16

on an annual basis, unless required more frequently by additional applicable federal requirements, a certification of compliance by the ~~P~~permittee's 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<sup>st</sup> through December 31<sup>st</sup>. The report shall be submitted by January 30<sup>th</sup> of each year. The initial report shall be for the period January 1<sup>st</sup> 2009 through December 31<sup>st</sup>, 2009 and shall be submitted by March 1<sup>st</sup>, 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:
  - i. The identification of each term or condition of the Title V~~Authority to Construct/PSD~~ permit that is the basis of the certification.
  - ii. The method(s) used for determining the compliance status of the source, currently and over the reporting period, and whether such method(s) provides continuous or intermittent data.
  - iii. The status of compliance with the terms and conditions of the Title V~~Authority to Construct/PSD~~ permit for the period covered by the certification, based on the method designated in Section D (~~ii~~2) of this condition.
  - iv. Such other facts as the APCO~~Air Pollution Control Officer~~ may require in order to determine the compliance status of the source.
  - v. A method for monitoring the compliance of the stationary source with its emissions limitations, standards, and work practices. [~~NCUAQMD Rule 102 Section 5.0~~]  
[~~NCUAQMD Rule 504 § 10~~]District Rule 504(J); 40 CFR 70.6(b)(5)]<sup>21</sup>

<sup>21</sup> Page 13 of Permit To Operate, Condition 17

## AQ-16

The District made the following minor administrative changes to **AQ-16** to reference the correct District Rule and to reference the permit as the Title V permit and to specify the timing for providing a written statement concerning any deviation from a permit condition to the District.

**AQ-16** The ~~P~~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 ~~P~~permittee shall notify the ~~APCO Air Pollution Control Officer~~ by telephone followed by a written statement ~~within seven (7) days~~ describing the nature of the deviation from the federally enforceable permit condition. [NCUAQMD Rule 102 Section 5.0] [~~NCUAQMD Rule 504 Section 5~~] [~~District Rule 504(E)~~]; 40 C.F.R. 70.6(a)(3)(iii)]<sup>22</sup>

## AQ-17

The District made the following minor administrative changes to **AQ-17** to reference the correct District Rule.

**AQ-17** 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~~ electronic data 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~~] [~~NCUAQMD Rule 502 Section 10~~] [~~District Rule 502(J) and Rule 504(C)~~]; 40 C.F.R. 70.6(a)(3)(ii)]<sup>23</sup>

## AQ-18

The District made the following minor administrative changes to **AQ-18** to reference the correct District Rule.

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<sup>22</sup> Page 13 of Permit To Operate, Condition 18

<sup>23</sup> Page 14 of Permit To Operate, Condition 19

**AQ-18** The ~~P~~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~~]District Rule 104(A)(1)<sup>24</sup>

#### **AQ-19**

The District made the following minor administrative changes to **AQ-19** to reference the H&SC §41701 instead of the District Rule and to clarify that the three minute in one hour time period applies to aggregated periods.

**AQ-19** The ~~Powner, operator or permittee of this 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 aggregating more than three minutes in any one hour which is:

- a. As dark or darker in shade as that designated No. 2 (3 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. [H&SC §41701]~~[NCUAQMD Rule 104 Section 2]~~<sup>25</sup>

<sup>24</sup> Page 14 of Permit To Operate, Condition 20

<sup>25</sup> Page 14 of Permit To Operate, Condition 21

## AQ-20

The District modified **AQ-20** by deleting a table in the condition and referencing the table in its rules. The modifications are shown below.

### **AQ-20** Particulate Discharge Limitation

- a. General Combustion Sources: The Permittee 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(K)-~~Section 11.0~~), as applicable.
- b. Steam Generating Units: The Permittee 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 [District Rule 104(K)].
- 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 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~~ listed in Rule 104 Table 1. [District Rule 104]:

**TABLE I**

<b>ALLOWABLE RATE OF EMISSION BASED ON PROCESS WEIGHT RATE</b>					
<b>Process Weight Rate</b>		<b>Emission</b>	<b>Process Weight Rate</b>		<b>Emission</b>
<b>Lb/Hr</b>	<b>Kg/Hr</b>	<b>Lb/Hr</b>	<b>Lb/Hr</b>	<b>Kg/Hr</b>	<b>Lb/Hr</b>
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	684	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. [NCUAQMD Rule 104]<sup>26</sup>~~

**AQ-21**

The District made the following minor administrative changes to **AQ-21** to reference the correct District Rule.

**AQ-21** The Permittee shall not handle, transport, store or allow open storage of materials in such a manner which allows or has the

<sup>26</sup> Page 14-15 of Permit To Operate, Condition 22

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 – District Rule 104(D)-Section-4~~]<sup>27</sup>

## **AQ-22**

The District made the following minor administrative changes to **AQ-22** to reference the correct District Rule.

- AQ-22** The ~~P~~permittee(s) shall not discharge into the atmosphere from any single source of emissions sulfur oxides (calculated as sulfur dioxide (SO<sub>2</sub>)) in excess of 1,000 ppm; or in excess of the specific source emission limitations of Federal New Source

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<sup>27</sup> Page 15 of Permit to Operate, Condition 23

Performance Standards, as applicable. [~~NCUAQMD–District~~  
Rule 104(~~E~~)-~~Section 5~~]<sup>28</sup>

### **AQ-23**

The District made the following minor administrative changes to **AQ-23** to reference the correct District Rules.

**AQ-23** The ~~P~~ermittee 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 ~~P~~ermittee having first obtained a Coordinated Authorized Burn Permit from the ~~APCO~~Air Pollution Control Officer. [~~NCUAQMD–District~~ Rules 2001 & 2034.]<sup>29</sup>

### **AQ-24**

The District made the following minor administrative changes to **AQ-24** to reorganize the language and to reference the correct District Rules.

**AQ-24** The ~~P~~ermittee shall comply with the emergency provisions contained in all applicable federal requirements.

A. Within two working days of the emergency event, the Permittee shall notify the Air Pollution Control Officer with a description of the emergency and any mitigating or corrective actions taken. [District Rule 502 §9.0]

~~A.B.~~ Within two weeks of an emergency event, the owner(s), operator(s) or ~~permittee's—the~~ responsible official shall submit to the ~~APCO–Air Pollution Control Officer~~ a signed contemporaneous log or other relevant evidence which demonstrates that:

- i. An emergency occurred.
- ii. Identification of the cause(s) of the emergency.

<sup>28</sup> Page 15 of Permit to Operate, Condition 24

<sup>29</sup> Page 15 of Permit To Operate, Condition 25

- iii. The facility was being properly operated at the time of the emergency.
- iv. Identification of each and every step taken to minimize the emissions resulting from the emergency.

~~v. 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.C.~~ The ~~P~~permittee has the burden of proof to establish that an emergency occurred in any enforcement proceeding. ~~[NGUAQMD Rule 105 Section 5.0]~~<sup>30</sup>

### AQ-25

The District made the following minor administrative changes to **AQ-25**.

**AQ-25** The ~~P~~permittee shall not allow or cause the opening of appliances containing chlorofluorocarbons (CFCs) for maintenance, service, repair, or disposal unless first complying with the required practices set out pursuant to 40 C.F.R. 82.156. ~~[40 C.F.R. 82 Subpart F.]~~

### AQ-26

The District corrected typographical errors in **AQ-26** as follows.

**AQ-26** 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.]~~

### AQ-27

The District corrected typographical errors in **AQ-27** as follows.

**AQ-27** The ~~P~~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.]~~

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<sup>30</sup> Page 16 of Permit to Operate, Condition 26

### **AQ-28**

The District corrected typographical errors in **AQ-28** as follows.

- AQ-28** The ~~P~~ermittee shall comply with the standards of 40 C.F.R. 61 Subpart M which regulates demolition and renovation activities pertaining to asbestos materials.

### **AQ-29**

The District made the following minor administrative changes to **AQ-29** to reference the correct District Rules.

- AQ-29** The ~~P~~ermittee shall pay an annual permit fee and other fees as required in accordance with ~~NCUAQMD-District Regulation IV, Rule 406 Title V Fees~~Rules. Failure to pay these fees by the dates due will result in immediate suspension of this ~~Authority to Construct/PSD Title V~~ Permit to Operate effective on the date the fees were due, and on notification by the ~~APCO-Air Pollution Control Officer~~ of such suspension. Operation without an effective ~~Authority to Construct/PSD Title V~~ permit subjects the ~~owner(s), operator(s) and P~~ermittee(s) to potential enforcement action by the ~~NCUAQMD-District~~ and the U.S. EPA pursuant to District Rules and Section 502(a) of the Clean Air Act as amended in 1990. [~~NCUAQMD-District~~ Regulation IV Rule 406]<sup>31</sup>

### **AQ-30**

The District made no changes to **AQ-30**.

### **AQ-31**

The District made the following minor administrative change to **AQ-31**.

- AQ-31** If subject to Section 112(r) of the CAA and 40 C.F.R. Part 68, the ~~P~~ermittee 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

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<sup>31</sup> Page 16 of Permit to Operate, Condition 31

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.]

### **AQ-32**

The District made the following minor administrative changes to **AQ-32** to reference the correct District Rules.

- AQ-32** 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 CFR Part 68]<sup>32</sup>

### **AQ-33**

The District made the following minor administrative change to **AQ-33**.

- AQ-33** 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<sup>th</sup> of each year. [40 C.F.R. Part 68.]

### **AQ-34**

The District made the following minor administrative changes to **AQ-34**.

- AQ-34** 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 District, 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–Air Pollution Control Officer within 30 (thirty) days of the transfer of ownership and which notification shall

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<sup>32</sup> Page 17 of Permit to Operate, Condition 34

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]<sup>33</sup>~~

### **AQ-35**

The District made the following minor administrative changes to **AQ-35** to reference the correct District Rules.

**AQ-35** 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]~~40 CFR 603.6(a)(5); District Rule 504(B)(8)]<sup>34</sup>

### **AQ-36**

The District deleted **AQ-36**.

### **NEW PTO CONDITION 39**

The District added the following PTO Condition 39 which is reproduced below.

New Condition 39 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

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<sup>33</sup> Page 17 of Permit to Operate, Condition 36 and 37

<sup>34</sup> Page 17 of Permit to Operate, Condition 38

notification to the Air Pollution Control Officer within 30 (thirty) days of transfer of ownership.<sup>35</sup>

#### **NEW PTO CONDITION 40**

The District added the following PTO Condition 40 which appears to repeat Condition of Certification **AQ-35**.

New Condition 40 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. [40 CFR 60.6(b)(5); District Rule 504(B)(8)]<sup>36</sup>

#### **AQ-37**

The District made the following minor administrative changes to **AQ-37**.

**AQ-37** The ~~P~~permittee ~~of this 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~~Air Pollution Control Officer.<sup>37</sup>

#### **AQ-38**

The District made the following minor administrative changes to **AQ-38**.

**AQ-38** This permit is effective only upon payment of the ~~initial~~ permit fees set out in ~~NCUAQMD-District~~ Rules and Regulations.<sup>38</sup>

#### **AQ-39**

The District made the following minor administrative changes to **AQ-39**.

**AQ-39** This permit is issued pursuant to California Health and Safety Code Section 42300. Commencement of any act or operation authorized by this ~~P~~permit shall be conclusively deemed to be acceptance of all terms and conditions contained herein.

<sup>35</sup> Page 18 of Permit to Operate, Condition 39

<sup>36</sup> Page 18 of Permit to Operate, Condition 40

<sup>37</sup> Page 18 of Permit to Operate, Condition 41

<sup>38</sup> Page 18 of Permit to Operate, Condition 42

#### **AQ-40**

The District made the following minor administrative changes to **AQ-40**.

**AQ-40** The ~~P~~permittee shall comply with all conditions of this permit. Any violation of any condition of this permit is a violation of ~~NCUAQMD-District~~ Rules and Regulations, and California State Law. [~~NCUAQMD-District~~ Rule 105 ~~(A)§1.0.~~]<sup>39</sup>

#### **AQ-41**

The District made the following minor administrative changes to **AQ-41** to reference the correct District Rule.

**AQ-41** The permit conditions shall be liberally construed for the protection of the health, safety and welfare of the people of the ~~NCUAQMDDistrict.~~ [~~NCUAQMD-District~~ Rule 100~~(F)(3)-§6.3;~~ ~~Rule 102-§5.0.~~]<sup>40</sup>

#### **AQ-42**

The District made the following minor administrative changes to **AQ-42** to reference the correct District Rule.

**AQ-42** The ~~NCUAQMD-District~~ Rules and Regulations may be superseded or revised by the ~~NCUAQMD-District~~ Board with notice as required by state law. It is ~~P~~permittee's responsibility to stay current with Rules and Regulations governing its business. The ~~P~~permittee is therefore expected to comply with all applicable Rules and Regulations. [~~NCUAQMD-District~~ Rule 100~~(F)-§6.0;~~ Rule 105~~(A)-§1.0~~]<sup>41</sup>

#### **AQ-43**

The District made the following minor administrative changes to **AQ-43** to reference the correct District Rule.

**AQ-43** 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

<sup>39</sup> Page 18 of Permit to Operate, Condition 44

<sup>40</sup> Page 18 of Permit to Operate, Condition 45

<sup>41</sup> Page 18 of Permit To Operate, Condition 46

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 District Rule 102-105-§5.0~~]<sup>42</sup>

#### **AQ-44**

The District made the following minor administrative changes to **AQ-44** to reference the correct District Rule and conform the condition to the language in the correct District Rule.

**AQ-44** ~~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.] Prior to building, erecting, altering, or replacing any article, machine, equipment, or other contrivance where the use of said article may result in the discharge of air pollutants or in the reduction, elimination, or control of air pollutants, the Permittee shall obtain written authorization from the APCO. [District Rule 102]~~<sup>43</sup>

#### **AQ-45**

The District made the following minor administrative changes to **AQ-45**.

**AQ-45** Knowing and willful misrepresentation of a material fact in the application for the permit, or failure to comply with any condition of the ~~P~~permit, or of the ~~NCUAQMD-District~~ Rules and

<sup>42</sup> Page 18 of Permit To Operate, Condition 47

<sup>43</sup> Page 19 of Permit to Operate, Condition 48

Regulations, or any state or federal law, shall be grounds for revocation of this permit. [~~NCUAQMD-District~~ Rule 102.]<sup>44</sup>

#### **AQ-46**

The District made the following minor administrative changes to **AQ-46**.

**AQ-46** 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 ~~P~~permit. [~~NCUAQMD-District~~ Rule 104~~(A)(2)-§1.2.~~]<sup>45</sup>

#### **AQ-47**

No modifications were made to **AQ-47**.

#### **AQ-48**

The District made the following minor administrative changes to **AQ-48**.

**AQ-48** The "Right of Entry", as delineated in ~~NCUAQMD-District~~ Rule 109~~(A)-§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~~~~District~~, CARB, or other authorized personnel shall be grounds for permit suspension or revocation.<sup>46</sup>

#### **AQ-49**

The District made the following minor administrative changes to **AQ-49**.

**AQ-49** The APCO reserves the right to amend this ~~P~~permit in order to ensure compliance with all applicable ~~F~~federal, ~~S~~state, and ~~L~~local laws, ~~R~~rules and ~~R~~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.<sup>47</sup>

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<sup>44</sup> Page 19 of Permit to Operate, Condition 49

<sup>45</sup> Page 19 of Permit to Operate, Condition 50

<sup>46</sup> Page 19 of Permit to Operate, Condition 52

<sup>47</sup> Page 19 of Permit to Operate, Condition 53

### **AQ-50**

The District deleted **AQ-50**.

### **AQ-51**

The District made the following minor administrative changes to **AQ-51**.

**AQ-51** If any provision or condition of this ~~P~~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.~~]<sup>48</sup>

### **AQ-52**

The District made the following minor administrative changes to **AQ-52**.

**AQ-52** This permit shall be posted in a conspicuous location at the site and shall be made available to ~~NCUAQMD—District~~ representatives upon request. [NCUAQMD Rule 102 §8.0.]<sup>49</sup>

### **AQ-53**

The District made the following minor administrative changes to **AQ-53**.

**AQ-53** The permittee shall pay an annual permit fee and other fees as required in accordance with ~~NCUAQMD—District~~ Regulation IV. Failure to pay these fees will result in the forfeiture of this ~~P~~permit. Operation without a permit subjects the source to potential enforcement action by the ~~NCUAQMD~~~~District~~. 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—District~~ Regulation IV – Fees.]<sup>50</sup>

### **AQ-54**

The District made the following minor administrative changes to **AQ-54**.

**AQ-54** 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

<sup>48</sup> Page 19 of Permit to Operate, Condition 54

<sup>49</sup> Page 19 of Permit to Operate, Condition 55

<sup>50</sup> Page 19 of Permit to Operate, Condition 56

change in control or ownership of the subject facility, the ~~P~~ermittee shall notify the succeeding owner of this permit and its conditions; and shall notify the ~~NCUAQMD-District~~ of the change in control or ownership within fifteen (15) days of that change. [~~NCUAQMD-District~~ Rule 400(E)]-§5.0.]<sup>51</sup>

### **AQ-55**

The District made the following minor administrative changes to **AQ-55** to reference the correct District Rule.

**AQ-55** 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-District~~ Rule 400(E) §5.0; Rule 102 §5.0.]<sup>52</sup>

### **AQ-56**

The District made the following minor administrative changes to **AQ-56**.

**AQ-56** For purposes of this ~~P~~ermit, 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. [~~NCUAQMD-Rule 102 §5.0.~~]<sup>53</sup>

### **AQ-57**

The District made the following minor administrative changes to **AQ-57**.

**AQ-57** This permit does not authorize the emission of air contaminants in excess of those allowed by the Federal Clean Air Act,

<sup>51</sup> Page 19 of Permit to Operate, Condition 57

<sup>52</sup> Page 20 of Permit to Operate, Condition 58

<sup>53</sup> Page 20 of Permit to Operate, Condition 59

California Health and Safety Code or the Rules and Regulations of the NCUAQMD District. This permit shall not be considered as permission to violate existing laws, ordinances, regulations or statutes of other governmental agencies.<sup>54</sup>

### AQ-58

The District made the following minor administrative changes to **AQ-58**.

**AQ-58** The 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&SC §41700; NCUAQMD District Rule 104(A)(1) ~~§1.1.~~]<sup>55</sup>

### AQ-59

The District made the following modifications to **AQ-59** to include an opacity standard and to specify the EPA reference method.

**AQ-59** 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 in excess of twenty (20) percent opacity, or as dark or darker in shade as that designated as No. 12 on the Ringelmann Chart, calculated as a six minute average. Opacity observations shall be taken and recorded as described in EPA Reference Method 9 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 District~~ Rule 104(D) ~~§2.0~~]<sup>56</sup>

<sup>54</sup> Page 20 of Permit to Operate, Condition 60

<sup>55</sup> Page 20 of Permit to Operate, Condition 61

<sup>56</sup> Page 20 of Permit to Operate, Condition 62

### AQ-60

The District made the following minor administrative changes to **AQ-60** to reference the correct District Rule.

- AQ-60** 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-District~~ Rule 104(~~D~~)-§4.0.]

### AQ-61

The District made the following minor administrative changes to **AQ-61** to delete reference to the District Rule.

- AQ-61** 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 ~~P~~permit. [~~NCUAQMD Rule 102-§5.0.~~]

### AQ-62

The District made the following minor administrative changes to **AQ-62** to reference the correct District Rule.

- AQ-62** The permittee shall provide training and instruction to all affected contractor(s), subcontractor(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-District~~ Rule 10~~25~~-§5.0.]<sup>57</sup>

### **AQ-63**

The District made the following minor administrative changes to **AQ-63** to reference the correct District Rules.

**AQ-63** Permittee shall furnish to the APCO, within a reasonable time, any information that the ~~NCUAQMD-District~~ may request to determine compliance with this ~~P~~permit or whether cause exists for modifying, revoking and reissuing, or terminating this permit. Upon request, ~~P~~permittee shall also furnish to the ~~NCUAQMD District~~ copies of records required to be kept by this permit. The records shall be submitted within the time period determined by the APCO. [~~HGH&SC~~ §42303; ~~NCUAQMD~~ Rule 103(~~F~~) §6.0, ~~Rule 102-§5.0~~]<sup>58</sup>

### **AQ-64**

The District made the following minor administrative changes to **AQ-64** to reference the correct District Rule.

**AQ-64** Title V permit expiration terminates the ~~P~~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(~~B~~)(~~2~~)-§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. [~~District Rule 502(A)(2)40-CFR 70.7(c) (1) (ii)~~]<sup>59</sup>

### **AQ-65**

The District deleted **AQ-65**.

### **AQ-66**

The District deleted **AQ-66**.

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<sup>57</sup> Page 21 of Permit to Operate, Condition 65

<sup>58</sup> Page 21 of Permit to Operate, Condition 66

<sup>59</sup> Page 21 of Permit to Operate, Condition 68

## **NEW PTO CONDITION 67**

The District added a new Condition 67 in the PTO which is reproduced below.

New Condition 67 The Permittee shall record the following information in the event of an equipment breakdown or malfunction of Authorized Equipment which creates, causes, or results in a violation of any emission limitation or restriction prescribed by District Rules or State law: date and time of event; event duration; a description of event; the cause of the event; what corrective measures were taken, including what actions were taken to prevent re-occurrence; if corrective actions were unsuccessful, what additional measures should be taken in the future; and the quantity of excess emissions released during the event. The Permittee shall report the information listed above to the District within 10 days of when the breakdown event was corrected. If the Permittee reports the event to the District in within one hour of its detection pursuant to Rule 105(E)(2), the APCO may elect to not take enforcement action if the requirements of Rule 105(E) are satisfied. [District Rule 105(E)]<sup>60</sup>

### **AQ-67**

The District made the following modifications to **AQ-67**. The primary changes include the addition of two emergency engines to the list of authorized emissions devices.

**AQ-67** ~~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. 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 1.1 below. This permit authorizes the operation of the equipment and specific components listed in Table 1 and 2.~~ 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)

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<sup>60</sup> Page 21 of Permit to Operate, Condition 67

oxidation catalyst respectively.” [~~NGUAQMD—District~~ Rule 504(B)(1)-§2.1.]<sup>61</sup>

**TABLE 1.0 - AUTHORIZED EMISSION DEVICES (HUMBOLDT BAY GENERATING STATION)**

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

<sup>61</sup> Page 22 of Permit to Operate, Condition 69

S-11	<u>Caterpillar C-15 Diesel-fired Emergency IC Engine, serial number FSE02399, powering an emergency generator</u> <del>Caterpillar DM8149 (or equivalent) Diesel-fired Emergency Reciprocating IC Engine powering a 350kW electrical generator</del>	469-546 HP
S-12	<u>Cummins CFP9E-F20 Diesel-fired Emergency IC Engine, serial number 73070231, powering a fire water pump</u> <del>Clarke/John Deere JU6H-UF50 (or equivalent) Diesel-fired Emergency Reciprocating IC Engine powering a fire water pump</del>	26810 HP

**Table 1.12 Authorized Control Devices**

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

**AQ-68**

The District made the following changes to **AQ-68** to modify the allowable nominal heat input rate for the engines.

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**AQ-68** 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 3.2.0, Table 2.1, or Table 2.2. ~~[NCUAQMD Rule 102 §5.0.]~~ Further, Natural Gas Mode heat input shall be the sum of the Higher Heating Values of the natural gas and diesel supplied. The diesel pilot heat input (total diesel supplied) for each engine shall not exceed 2.0 MMBtu/hr calculated on a three hour rolling average basis. [District Rule 102(E); 17 CCR §93115 PSD 2/09]<sup>62</sup>

**TABLE 2.03**

**S-1 Through S-120 Engine Specifications**

Engines S-1 through S-10	
Primary Fuel	Natural Gas
Backup Fuel	CARB Diesel
Design Ambient Temperature	67.5 °F
Nominal Heat Input Rate (HHV)	<del>144.743.9</del> MMBtu/hr natural gas plus <del>0.79</del> MMBtu pilot fuel <del>(natural gas mode)</del> —OR— 148.9 MMBtu/hr CARB Diesel Fuel <del>(diesel mode)</del>
Nominal Exhaust Temperature	728°F
Nominal 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
Engine S-11	

<sup>62</sup> Page 23 of Permit to Operate, Condition 70

Primary Fuel	CARB Diesel
Nominal Heat Input Rate (HHV)	4.0 MMBtu/hr
Heat Input, gal/hr	29.1
SIC	4911
SCC	20100301
Engine S-12	
Primary Fuel	CARB Diesel
Nominal Heat Input Rate (HHV)	1. <del>9468</del> MMBtu/hr
Heat Input, gal/hr	<del>14.22.3</del>
SIC	4911
SCC	20201607

**AQ-69**

The District made the following minor administrative changes to **AQ-69** to reference the correct District Rules.

**AQ-69** The ~~P~~ermittee shall only fire reciprocating engines S-1 through S-10 with fuel which meets or exceeds the fuel specifications identified in tables ~~42.3~~. Prior to firing reciprocating engines S-1 through S-10 with an ~~A~~alternative ~~F~~fuel or CARB Diesel with additives, the ~~P~~ermittee 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 ~~P~~ermittee 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-District Rule 102(E); PSD 2/09-§5.0~~]<sup>63</sup>

<sup>63</sup> Page 24 of Permit to Operate, Condition 71

**Table 2.34**

**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

**AQ-70**

The District made the following administrative changes to **AQ-70** to provide clarification regarding testing of the fuel consumption and hours of operation measuring devices.

**AQ-70** 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 for natural gas fuel meters, and once every 24 months for diesel fuel flow meters. Measuring devices shall be tested/calibrated at more frequent intervals if necessary to ensure compliance with the 1% accuracy requirement. [District Rule 102(E); PSD 2/09<sup>64</sup>]~~or at more frequent intervals if necessary to ensure compliance with the 1 percent accuracy requirement. [NCUAQMD Rule 102 §5.0]~~

**AQ-71**

The District made the following minor administrative changes to **AQ-71** to reference the correct District Rules.

**AQ-71** The exhaust stacks shall not be fitted with rain caps or any other similar device which would impede vertical exhaust flow. [NCUAQMD District Rule 102(E); PSD 2/09-§5.0]<sup>65</sup>

<sup>64</sup> Page 24 of Permit to Operate, Condition 72

<sup>65</sup> Page 24 of Permit to Operate, Condition 73

### AQ-72

The District made the following minor administrative changes to **AQ-72** to reference the correct District Rules.

**AQ-72** The ~~P~~ermittee 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-District~~ Rule 102(~~E~~)-~~§5-0~~]<sup>66</sup>

### AQ-73

The District made the following minor administrative changes to **AQ-73**.

**AQ-73** The Emergency IC Diesel Generators S-11 and S-12 shall use one of the following fuels:

- CARB diesel fuel, or
- An alternative diesel fuel that meets the requirements of the ~~V~~erification ~~P~~rocedure (as codified in CCR Title 13 Sections 2700-2710), or
- CARB ~~D~~iesel ~~F~~uel used with fuel additives that meets the requirements of the ~~V~~erification ~~P~~rocedure (as codified in CCR Title 13 Sections 2700-2710), or
- Any combination of a) through ~~c~~) above.<sup>67</sup>

### AQ-74

The District deleted **AQ-74**.

### AQ-75

The District deleted **AQ-75**.

### AQ-76

The District deleted **AQ-76**.

### AQ-77

The District deleted **AQ-77**.

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<sup>66</sup> Page 25 of Permit to Operate, Condition 74

<sup>67</sup> Page 25 of Permit to Operate, Condition 75

### **AQ-78**

The District made the following minor administrative changes to **AQ-78** to reference the correct District Rules.

**AQ-78** The ~~P~~ermittee shall install exhaust gas temperature monitoring devices at the inlet and the outlet of the oxidation catalyst. [40 C.F.R. §63.6625; PSD 2/09 BACT]<sup>68</sup>

### **AQ-79**

The District made the following minor administrative changes to **AQ-79** to reference the correct District Rules.

**AQ-79** 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 tested/calibrated at least once every twelve months or at more frequent intervals if necessary to ensure compliance with the ~~1% percent~~ requirement. [~~NCUAQMD District~~ Rule 102(~~E~~); PSD 2/09-§5-0]

### **AQ-80**

The District made the following minor administrative changes to **AQ-80** to reference the correct District Rules.

**AQ-80** The ~~P~~ermittee shall install points of access to the ~~E~~mission ~~D~~evices, ~~C~~ontrol ~~D~~evices, and ~~C~~ontinuous ~~E~~mission ~~M~~onitoring ~~D~~evices 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 ~~S~~ection of this ~~P~~ermit; and the collection of gas samples with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> 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

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<sup>68</sup> Page 25 of Permit to Operate, Condition 76

Procedures for Stationary Emission Monitoring and Testing.  
[~~NGUAQMD-District~~ Rule 102(E); PSD 2/09-§5.0]<sup>69</sup>

### **AQ-81**

The District made the following minor administrative changes to **AQ-81** to reference the correct District Rules.

**AQ-81** Each reciprocating engine S-1 through S-10 shall be equipped with a continuous emission monitor (CEM) for NO<sub>x</sub>, CO, and O<sub>2</sub>. Continuous emissions monitor(s) shall meet the requirements of 40 C.F.R. part 60, Appendices B and F, and ~~NGUAQMD-District~~-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 ~~S~~startup and ~~S~~shutdown periods. [~~NGUAQMD—District~~ Regulations Appendix B; PSD 2/09]<sup>70</sup>

### **AQ-82**

The District made the following minor administrative changes to **AQ-82** to reference the correct District Rules.

**AQ-82** The permittee shall demonstrate compliance with the ammonia slip limit by using the following calculation procedure: The ammonia injection rate to each SCR control system shall be continuously recorded. Correlations between the engine heat input rates, the SCR system ammonia injection rates, and corresponding ammonia emission concentration shall be determined for each fuel in accordance with the Testing and Compliance Monitoring section of this permit. Alternatively, the ~~P~~permittee may be required to install, operate, and maintain a continuous in-stack emissions monitor for emissions of ammonia. The ~~P~~permittee shall obtain APCO approval for the installation and use the ammonia CEMs equipment at least 60 days prior to the planned installation date. [~~NGUAQMD-District~~ Rule 103(F)-§6.0]<sup>71</sup>

<sup>69</sup> Page 25 of Permit to Operate, Condition 78

<sup>70</sup> Page 25 of Permit to Operate, Condition 79

<sup>71</sup> Page 25-26 of Permit to Operate, Condition 80

### **AQ-83**

The District deleted **AQ-83**.

### **AQ-84**

The District made the following minor administrative changes to **AQ-84** to reference the correct District Rules.

**AQ-84** 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 CO<sub>2</sub> at standard conditions. [~~NCUAQMD-District~~ Rule 104(~~C~~)(1)-~~§3.4~~]<sup>72</sup>

### **AQ-85**

The District made the following minor administrative changes to **AQ-85** to reference the correct District Rules.

**AQ-85** 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-District~~ Rule 104(~~E~~)-~~§5.0~~]<sup>73</sup>

### **AQ-86**

The District made the following minor administrative changes to **AQ-86** to reflect and reference the correct District Rules. Additionally, the Condition was revised to eliminate the exemption for startup or shutdown periods and during the commissioning period.

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<sup>72</sup> Page 26 of Permit to Operate, Condition 81

<sup>73</sup> Page 26 of Permit to Operate, Condition 82

**AQ-86** 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 aggregating 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 District Rule 104(B)(3)2 §5.0~~]<sup>74</sup>

#### **AQ-87**

The District made the following minor administrative changes to **AQ-87** to reference the correct District Rules and to eliminate reference to the commissioning period.

**AQ-87** The Permittee shall not operate reciprocating engines S-1 through S-12 such that the emissions of NOx, from a combination of all engines, exceeds 392 lbs per hour. Furthermore, ~~except 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 Sstartup Period during any one clock hour. [District Rule 102(E); PSD 2/09]<sup>75</sup>

#### **AQ-88**

The District made the following minor administrative changes to **AQ-88**.

**AQ-88** 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 CFR Part 60 Subpart III]<sup>76</sup>

#### **AQ-89**

The District made the following minor administrative changes to **AQ-89** to reference the correct District Rules.

**AQ-89** The permittee shall not discharge carbon monoxide from reciprocating engines S-1 through S-10 in excess of 0.14 g/bhp-

<sup>74</sup> Page 26 of Permit to Operate, Condition 83

<sup>75</sup> Page 26 of Permit to Operate, Condition 84

<sup>76</sup> Page 26 of Permit to Operate, Condition 85

hr or 20 ppmvd @ 15% O<sub>2</sub>. [40 C.F.R. 63 Subpart ZZZZ, District Rule 110]<sup>77</sup>

**AQ-90**

The District made the following changes to **AQ-90** to allow an increase in the pilot heat input limit from 0.8 MMBtu/hour to 2.0 MMBtu/hour.

**AQ-90** 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 4.05 on a per engine basis. Further, the Permittee shall not operate S-1 through S-10 such that diesel pilot heat input per engine exceeds 2.0 MMBtu/hr on a rolling three hour average basis. [District Rule 102(E); 17 CCR §93115; PSD 2/09 [NGUAQMD Rule 102 §5.0]]<sup>78</sup>

**TABLE 54.0**

**Heat Input Limitations Per Engine**

Each Unit <sup>4</sup>		Heat Input, MMBtu (HHV)	
		Hourly (3 hr rolling average)	Daily (Calendar Day)
Natural Gas Mode <sup>2</sup>	Natural Gas	1443.79	3,47354
	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) 1) Heat input in natural gas mode is the sum of natural gas and diesel pilot also.~~

**AQ-91**

The District made the following changes to **AQ-91** to reference the modification to allow the heat input capacities to be calculated on an annual basis rather than on an hourly or

<sup>77</sup> Page 26 of Permit to Operate, Condition 86

<sup>78</sup> Page 26 of Permit to Operate, Condition 87

daily basis and providing an annual limit that combines the heat input from the diesel pilot (no more than 5 percent) and natural gas operations..

**AQ-91** 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 4.16 below calculated as a sum of all 10 engines. Further, while operating in Natural Gas Mode, the percentage of heat input derived from diesel shall not exceed 5% on an annual basis (calendar year). [District Rule 102(E); 17 CCR §93115; PSD 2/09]~~Fuel combusted during compliance testing shall not accrue toward the limitations established in this condition. [NGUAQMD Rule 102 §5.0]~~<sup>79</sup>

**Table 64.1**

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

Sum of All 10 Units		Heat Input, MMBtu (HHV) Hourly Annual (Calendar Year)	
Natural Gas Mode <sup>1</sup>	Natural Gas	1,439	
	Diesel Pilot	34,536	9,328,809
		9,277,233 <sup>2</sup>	
		7.9	
		190	
		51,576	
Diesel Mode	Diesel	1,489	148,900

**Notes:**

- 1) Total heat input in natural gas mode is the sum of natural gas and diesel pilot.

**AQ-92**

The District made the following modifications to **AQ-92** to allow an increase in the amount of diesel fuel that can be used during natural gas operations (pilot).

**AQ-92** The permittee shall not exceed the diesel fuel firing limits while operating reciprocating engines S-1 through S-10 in the modes listed in Tables 7 and 8 below. ~~Fuel combusted during compliance testing shall not accrue toward the limitations~~

<sup>79</sup> Page 27 of Permit To Operate Condition 88

established in this condition. [District NCUAQMD Rule 102 §5.0; PSD 2/09)]<sup>80</sup>

A. NATURAL GAS MODE.

Table 74.2

Diesel Fuel Firing Limitations (Pilot)

Engines S-1 Through S-10	Gallons of Diesel Fuel		
	Hourly 3 hr rolling average	Daily (Calendar Day)	Annual 365 day rolling average
All Combined	14658	3,5041,402	948,562376, 734

B. DIESEL MODE.

Table 84.3

Diesel Fuel Firing Limitations

Engines S-1 Through S-10	Gallons of Diesel Fuel		
	Hourly 3 hr rolling average	Daily (Calendar Day)	Annual 365 day rolling Average
Per Engine	1,088	26.106	—
All Combined	10,876	221,877	1,087,630

**AQ-93**

The District made the following minor administrative changes to **AQ-93** to reference the correct District Rule.

**AQ-93** The Permittee shall not operate reciprocating engines S-1 through S-10, such that they individually discharge pollutants exceeding the limits identified in Table 9 below during Sstartup or

<sup>80</sup> Page 27 of Permit To Operate, Condition 89

Shutdown periods. [NCUAQMD District Rule 102 (E); PSD 2/09-§5-0]<sup>81</sup>

**TABLE 95-0**

**Start & Shutdown Period Emission Limits**

Mode of Operation	Pollutant				
	NOx	CO	ROC	PM10	SOx
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

**AQ-94**

The District made the following minor administrative changes to **AQ-94** to reference the correct District Rule.

**AQ-94** The Permittee shall not operate reciprocating engines S-1 through S-10, such that they individually discharge pollutants exceeding the limits identified in Table 105-4 below based upon a three (3) hour average with the exception of NOx which shall be based upon a one (1) hour average. The limits shall not apply during Sstartup or Sshutdown periods. [40 C.F.R. 63.6(f)(1), NCUAQMD District Rule 102(E); PSD 2/09-§5-0]<sup>82</sup>

**TABLE 105-4**

**Natural Gas Mode Emission Limits—per engine**

Pollutant	Emission Rate ( <u>per engine</u> )		
	ppmvd @ 15% O <sub>2</sub>	lb/hr	lb/MMBtu
CO	13	4.13	0.029
NH <sub>3</sub>	10	1.9	0.013
NOx	6.0	3.1	0.022
PM <sub>10</sub>	-	3.6	-
ROC	28	5.1	0.035
Sox	-	0.40	0.0028

<sup>81</sup> Page 28 of Permit To Operate, Condition 90

<sup>82</sup> Page 28 of Permit To Operate, Condition 91

**AQ-95**

The District made the following minor administrative changes to **AQ-95** to reference the correct District Rules.

**AQ-95** The combined discharge of pollutants, from the reciprocating engines S-1 through S-10 shall not exceed the limits listed in Table 115.2 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 Sstartup and Sshutdown Periods shall be included in the daily calculation of emissions. [NCUAQMD District Rule 102 §5.0(E); PSD 2/9]<sup>83</sup>

**TABLE 511.2**

**S-1 Through S-10 Combined Natural Gas Mode Daily Limits**

<b>Pollutant</b>	<b>Emission Rate lb/Day</b>
CO	1,589
NH <sub>3</sub>	456
NOx	1,360
PM <sub>10</sub>	864
ROC	1,608
Sox	97

**AQ-96**

The District made the following minor administrative changes to **AQ-96** to reference the correct District Rules.

**AQ-96** 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 125.3 below. The limits shall not apply during Sstartup or Sshutdown

<sup>83</sup> Page 29 of Permit To Operate, Condition 92

periods. [District Rule 102 (E); 40 C.F.R. 63.6(f)(1), NCUAQMD Rule 102-§5.0PSD 2/09.]<sup>84</sup>

**TABLE 125.3**

**Diesel Mode Emission Limits—per engine**

Pollutant	Emission Rate (per engine)		
	ppmvd @ 15% O <sub>2</sub>	lb/hr	lb/MMBtu
CO	20.0	6.9	0.047
NH <sub>3</sub>	10	2.1	0.014
NOx	35.0	19.9	0.134
PM <sub>10</sub>	-	<del>5.5</del> 4.8	0.137
ROC	40.0	7.9	0.053
SOx	0.40	0.22	0.0016

**AQ-97**

The District made the following minor administrative changes to **AQ-97** to reference the correct District Rules and to eliminate the exemption for commissioning.

**AQ-97** The discharge of ~~D~~iesel ~~P~~articulate ~~M~~atter into the atmosphere from the recip—roating engines S-1 through S-10 while in ~~D~~iesel ~~M~~ode shall not exceed the emission limits identified in Table ~~135.4~~ below. ~~The limits shall not apply during the commissioning period as defined in this permit.~~ [DistrictNCUAQMD Rule 102 (E); PSD 2/09§5.0]<sup>85</sup>

**TABLE 135.4**

**Diesel Particulate Matter Limitations**

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

<sup>84</sup> Page 29 of Permit To Operate, Condition 94

<sup>85</sup> Page 30 of Permit To Operate, Condition 95

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 ~~145.5~~ below during any ~~calendar~~ Day in which one or more of the engines are operated in diesel mode for any period of time. [District Rule 102(E); PSD 2/09]<sup>86</sup>

**TABLE 514.5**

**S-1 Through S-10 Combined Diesel Mode Daily Limits**

Pollutant	Emission Rate (lb/Day)
CO	2,219
NH <sub>3</sub>	506
NOx	9,103
PM10	1,542
ROC	2,183
SOx	97

**AQ-98**

The District deleted **AQ-98**.

**AQ-99**

The District made the following minor administrative changes to **AQ-99** to reference the correct District Rules.

**AQ-99** 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 155.6 below. [NCUAQM District Rule 102 (e); PSD 2/09§5-0]<sup>87</sup>

<sup>86</sup> Page 30 of Permit To Operate, Condition 96

<sup>87</sup> Page 30 of Permit To Operate, Condition 98

TABLE [155.6](#)

S-1 Through S-10 Combined Annual Emission Limits

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

**AQ-100**

The District made the following minor administrative changes to **AQ-100** to reference the correct District Rules and renumbered tables.

**AQ-100** The [P](#)ermittee shall not operate reciprocating engines S-11 and S-12 such that pollutant discharge into the atmosphere exceeds the quantities in Table [165.7](#) below. [NCUAQMD Rule 102 [\(E\)§5.0](#)]<sup>88</sup>

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<sup>88</sup> Page 31 of Permit To Operate, Condition 99

**TABLE [165.7](#)**

**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

**AQ-101**

The District made the following minor administrative changes to **AQ-101** to reference the correct District Rules and renumbered tables.

**AQ-101** 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 [175.8](#) below. [~~NCUAQM District~~ Rule 102 [\(E\)§5.0](#)]<sup>89</sup>

<sup>89</sup> Page 31 of Permit To Operate, Condition 100

**TABLE [175.8](#)**

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

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

**AQ-101 through AQ-120 (Commissioning Conditions)**

The District PTO has deleted all of the Commissioning Conditions.

**AQ-121**

The District made the following minor administrative changes to **AQ-121** to reference the correct District Rule.

**AQ-121** In the event of an excess emission incident, regardless of the cause, the Permittee shall take immediately ~~take~~ corrective action to minimize the release of excess emissions. Notice shall be provided to the District 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, District Rules, and this Permit. [40 C.F.R. 70.6(a)(3)(iii)(B); NCUAQMD Rule 105~~§5.0.~~]<sup>90</sup>

**AQ-122**

The District made the following minor administrative changes to **AQ-122** to reference the correct District Rules and the renumbered tables.

**AQ-122** All equipment listed in Table ~~1.0~~ Authorized Emission Devices and Table 24.4 Authorized Control Devices shall be operated and maintained by the Permittee in accordance with manufacturer's specifications for optimum performance; and in a

<sup>90</sup> Page 31 of Permit To Operate, Condition 101

manner so as to minimize emissions of air contaminants into the atmosphere. [~~NCUAQMD~~ Rule 102 (E); PSD 2/09-§5.0]<sup>91</sup>

### **AQ-123**

The District made the following minor administrative changes to **AQ-123** to reference the correct District Rules and to remove the precommissioning submittal requirement.

**AQ-123** The ~~P~~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 ~~P~~permittee shall not operate the reciprocating engines S-1 through S-12 and their associated control devices unless a ~~NCUAQMD~~District 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. [District NCUAQMD~~ Rule 102 (E); PSD 2/09-§5.0]<sup>92</sup>

### **AQ-124**

The District made the following minor administrative changes to **AQ-124** to reference the correct District Rules and to remove the post commissioning submittal requirement.

**AQ-124** The ~~p~~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

<sup>91</sup> Page 32 of Permit To Operate, Condition 102

<sup>92</sup> Page 32 of Permit To Operate, Condition 103

normal modes of operation. The Pplan shall also include specific protocols to be followed when transitioning between modes of operation. This plan shall be consistent with the requirements of this pPermit, 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 (60) calendar days following expiration of the commissioning period for any of reciprocating engines S-1 through S-10.~~ The Pplan is subject to APCO approval. The Ppermittee 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 NCUAQMDDistrict approved Device Operational Plan is in effect. [NCUAQMDDistrict Rule 102 (E);PSD 2/09 §5.0]<sup>93</sup>

#### **AQ-125**

The District made the following minor administrative changes to **AQ-125** to reference the correct District Rules and to remove the post commissioning submittal requirement.

**AQ-125** The Ppermittee 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 pPlan is subject to APCO approval. The Ppermittee 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 DistrictNCUAQMD approved Device Maintenance &

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<sup>93</sup> Page 32 of Permit To Operate, Condition 104

Replacement Plan is in effect. [[NCUAQMDistrict Rule 102 \(E\); PSD 2/09§5.0](#)]<sup>94</sup>

### **AQ-126**

The District made the following minor administrative changes to **AQ-126**.

**AQ-126** 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. [[NCUAQMDistrict Rule 102 \(E\); PSD 2/09§5.0](#)]<sup>95</sup>

### **AQ-127**

The District made the following minor administrative changes to **AQ-127** to reference the correct District Rules and to remove the commissioning exemption.

**AQ-127** The Permittee shall not operate reciprocating engines S-1 through S-10 such that Sstartup Periods exceed 60 minutes in length. ~~This limitation shall not apply during the commissioning period.~~ [[NCUAQMDistrict Rule 102 \(E\); PSD 2/09§5.0](#)]<sup>96</sup>

### **AQ-128**

The District made the following minor administrative changes to **AQ-128** to reference the correct District Rules and to remove the commissioning exemption.

**AQ-128** The Permittee shall not operate reciprocating engines S-1 through S-10 such that Sshutdown Periods exceed 30 minutes in length. ~~This limitation shall not apply during the commissioning period.~~ [[NCUAQMDistrict Rule 102§5.0\(E\); PSD 2/09](#)]<sup>97</sup>

### **AQ-129**

The District made the following minor administrative changes to **AQ-129** to reference the correct District Rules and to remove the commissioning exemption.

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<sup>94</sup> Page 32 of Permit To Operate, Condition 105

<sup>95</sup> Page 32 of Permit To Operate, Condition 106

<sup>96</sup> Page 32 of Permit To Operate, Condition 107

<sup>97</sup> Page 33 of Permit To Operate, Condition 108

**AQ-129** The Permittee shall not operate the reciprocating engines S-1 through S-10 such that the combined hours of operation during Sstartup and Sshutdown Periods exceeds 30 engine-hours per day. ~~This limitation shall not apply during the commissioning period.~~ [NCUAQMDistrict Rule 102 (E); PSD 2/09§5.0]<sup>98</sup>

### **AQ-130**

The District made the following minor administrative changes to **AQ-130** to reference the correct District Rules and to remove the commissioning exemption.

**AQ-130** The Permittee shall not operate the reciprocating engines S-1 through S-10 such that the combined hours of operation during Sstartup and Sshutdown Periods exceeds 3,650 engine-hours per calendar year. Of the 3,650 engine hours available, the hours of operation during Sstartup and Sshutdown Periods in Ddiesel Mmode 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.~~ [NCUAQMDistrict Rule 102-~~§5.0~~(E); PSD 2/09]<sup>99</sup>

### **AQ-131**

The District made the following minor administrative changes to **AQ-131** to reference the correct District Rules and to remove the commissioning exemption.

**AQ-131** The Permittee shall not operate any of the reciprocating engines S-1 through S-10 below 50 percent load except during Sstartup and Sshutdown Periods. ~~This limitation shall not apply during the commissioning period.~~ [NCUAQMDistrict Rule 102 (E); PSD 2/09§5.0]<sup>100</sup>

### **AQ-132**

The District made the following minor administrative changes to **AQ-132** to reference the correct District Rules and to remove the commissioning exemption.

**AQ-132** The Permittee shall not operate the reciprocating engines S-1 through S-10 for more than 80 engine-hours per Calendar Dday

<sup>98</sup> Page 33 of Permit To Operate, Condition 109

<sup>99</sup> Page 33 of Permit To Operate, Condition 110

<sup>100</sup> Page 33 of Permit To Operate, Condition 111

at loads less than 12.0 MW. ~~This limitation shall not apply during the commissioning period.~~ [NCUAQM District Rule 102 §5.0(E); PSD 2/09]<sup>101</sup>

### **AQ-133**

The District made the following minor administrative changes to **AQ-133**. The District PTO did not contain the reference to Condition of Certification **PUBLIC HEALTH-1** which was retained as it was added by the Commission.

**AQ-133** 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 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.<sup>102</sup>

### **AQ-134**

The District made the following minor administrative changes to **AQ-134** to specify that the condition does not apply during startup and shutdown periods.

**AQ-134** 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. This Condition shall not apply during Startup and Shutdown Periods. [40 C.F.R. 63 Subpart ZZZZ]<sup>103</sup>

<sup>101</sup> Page 33 of Permit To Operate, Condition 112

<sup>102</sup> Page 33 of Permit To Operate, Condition 113

<sup>103</sup> Page 33 of Permit To Operate, Condition 114

### **AQ-135**

The District made the following minor administrative changes to **AQ-135** to remove the commissioning and malfunction exemptions.

**AQ-135** 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 Sstartup or Sshutdown Periods, ~~during the commissioning period, or during malfunctions.~~ [40 C.F.R. 63 Subpart ZZZZ]<sup>104</sup>

### **AQ-136**

The District made the following minor administrative changes to **AQ-136** to remove the startup and shutdown, commissioning and malfunctions exemptions.

**AQ-136** 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]<sup>105</sup>

### **AQ-137**

The District made the following minor administrative changes to **AQ-137** to reference the correct District Rule and to correct the reference to the renumbered tables.

**AQ-137** The Permittee shall not operate the reciprocating engines S-11 and S-12, for the purpose of maintenance and testing, in excess

<sup>104</sup> Page 33 of Permit To Operate, Condition 115

<sup>105</sup> Page 33 of Permit To Operate, Condition 116

of the hour limits listed in Table [186.0](#) below [[NCUAQMDistrict Rule 102 \(E\)§5.0](#)]<sup>106</sup>

**TABLE [186.0](#)**

**S-11 and S-12 Hourly Operating Limits**

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

**AQ-138**

The District made the following minor administrative changes to **AQ-138** to reference the correct District Rule and new definitions.

**AQ-138** 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~~Calendar Day period. [[NCUAQMDistrict Rule 102-~~§5.0~~\(E\); PSD 2/09](#)]<sup>107</sup>

**AQ-139**

The District made the following minor administrative changes to **AQ-139** to reference the correct District Rule.

**AQ-139** 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. [[NCUAQMDistrict Rule 102\(~~E\)-§5.0~~](#)]<sup>108</sup>

**AQ-140**

The District made the following minor administrative changes to **AQ-140** to reference the correct District Rule and new definitions.

**AQ-140** The Permittee shall not operate reciprocating engine S-11, for the purpose of maintenance and testing, for more than 45

<sup>106</sup> Page 34 of Permit To Operate, Condition 118

<sup>107</sup> Page 34 of Permit To Operate, Condition 117

<sup>108</sup> Page 34 of Permit To Operate, Condition 119

minutes in any ~~Clock Hour~~60-minute period. [~~NCUAQMDistrict~~  
Rule 102(~~E~~)-§5.0]<sup>109</sup>

### **AQ-141**

The District made the following minor administrative changes to **AQ-141** to reference the correct District Rule.

**AQ-141** The ~~P~~permittee shall report all occurrences of breakdowns of the equipment listed in Table 1-~~0~~ Authorized Emission Devices or Table ~~24.1~~ Authorized Control Devices which result in the release of emissions in excess of the limits identified in this ~~P~~permit. Said report shall be submitted to the ~~NCUAQMDistrict~~ in accordance with the timing requirements of ~~NCUAQMDistrict~~ Rule 105 (~~E~~)§5.0.<sup>110</sup>

### **AQ-142**

The District made the following minor administrative changes to **AQ-142** to reference the correct District Rule.

**AQ-142** ~~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. [~~NCUAQMDistrict Rule 105 (E)2 §5.0~~][~~District Rule 105 §5.0~~]

### **AQ-143**

The District made the following minor administrative changes to **AQ-143**.

<sup>109</sup> Page 34 of Permit To Operate, Condition 120

<sup>110</sup> Page 35 of Permit To Operate, Condition 123

**AQ-143** 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, and
- G. Actions taken to prevent reoccurrence of excess emission event.<sup>111</sup>

#### **AQ-144**

The District made the following minor administrative changes to **AQ-144** to reference the correct District forms and to correct the reference to the renumbered tables.

**AQ-144** The Permittee shall provide to the NCUAQMDistrict, 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 (VK Series) must be submitted to the NCUAQMDistrict according to the following schedule: The semiannual certification (covering quarters 1 and 2) must be submitted prior to July 31<sup>st</sup> of the reporting year; and the annual certification (covering quarters 1, 2, 3, and 4) prior to March 1<sup>st</sup> of the following calendar year. The content of the Annual Certification shall include copies of the records designated in Table 197.0 to be kept “Annually”.<sup>112</sup>

#### **AQ-145**

The District did not propose any changes to **AQ-145**.

<sup>111</sup> Page 35 of Permit To Operate, Condition 125

<sup>112</sup> Page 35 of Permit To Operate, Condition 126

**AQ-146**

The District made the following minor administrative changes to **AQ-146** to reference the renumbered tables and modified the pilot heat language.

**AQ-146** The Permittee shall continuously maintain onsite for the most recent five year period and shall be made available to the NCUAQMD District APCO upon request, the records as listed in Table 207.0 below.<sup>113</sup>

**Table 207.0**

**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 IIII) 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 <sub>2</sub> ) B. CO (ppmvd @15% O <sub>2</sub> ) C. O <sub>2</sub> (%) D. Exhaust gas temperature as SCR inlet (°F) E. Exhaust gas temperature at OC inlet (°F) F. Engine load (%)

<sup>113</sup> Page 35 of Permit To Operate, Condition 128

Hourly (for each engine)	<ul style="list-style-type: none"> <li>A. NOx (ppmvd @15% O<sub>2</sub>) and lb/hr, on a 1 hour average</li> <li>B. CO (ppmvd @15% O<sub>2</sub>) and lb/hr, on a rolling 3 hour average</li> <li>C. ROC (ppmvd @15% O<sub>2</sub>) and lb/hr, on a rolling 3 hour average</li> <li>D. NH<sub>3</sub> (ppmvd @15% O<sub>2</sub>) and lb/hr, on a rolling 3 hour average</li> <li>E. SOx (ppmvd @15% O<sub>2</sub>) and lb/hr, on a rolling 3 hour average</li> <li>F. Natural gas fuel consumption (MMBtu HHV, hourly average)</li> <li>G. Diesel fuel consumption during diesel mode (MMBtu HHV, hourly average)</li> <li>H. <u>Percentage of total heat input derived from diesel during Natural Gas Mode (MMBtu HHV, hourly average)</u> <del>Volumetric proportion of natural gas to diesel pilot injection when operating in natural gas mode</del></li> <li>I. Diesel fuel consumption during Diesel Mode (MMBtu HHV, hourly average)</li> </ul>
Daily	<ul style="list-style-type: none"> <li>A. NOx (lbs/day, total for all engines)</li> <li>B. CO (lbs/day, total for all engines)</li> <li>C. ROC (lbs/day, total for all engines)</li> <li>D. SOx (lbs/day, total for all engines)</li> <li>E. PM (lbs/day, total for all engines)</li> <li>F. Diesel particulate matter (lbs/day, total for all engines)</li> <li>G. Natural gas fuel consumption (MMBtu HHV, and cubic feet for each engine and total for all engines)</li> <li>H. Diesel pilot fuel consumption (MMBtu HHV, all engines combined)</li> <li>I. Diesel fuel consumption during diesel mode (MMBtu HHV, and gallons for each engine and total for all engines)</li> <li>J. Engine load (% load on a 24 hour average for each engine and total for all engines)</li> <li>K. Hours of operation (each engine and total for all engines as a sum of operating minutes)</li> </ul>
Monthly	<ul style="list-style-type: none"> <li>A. Sulfur content of natural gas (gr/100scf, monthly fuel testing)</li> <li>B. Natural gas sulfur content (gr/100scf, 12 month rolling average)</li> </ul>

<p>Quarterly (combined total for all engines)</p>	<p>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, 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)</p>
<p>Annually (combined total for all engines)</p>	<p>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)</p>

**AQ-147**

The District made the following minor administrative changes to **AQ-147**.

**AQ-147** For each Quarter, the [P](#)ermittee 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 [NCUAQM District](#) 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.<sup>114</sup>

#### **AQ-148**

The District made the following minor administrative changes to **AQ-148**.

**AQ-148** The ~~p~~Permittee shall provide notification and record keeping as required pursuant to 40 C.F.R., Part 60, Subpart A, 60.7.<sup>115</sup>

#### **AQ-149**

The District made the following minor administrative changes to **AQ-148** to reference the correct guidance documents to use in preparation of the emission inventory report.

**AQ-149** 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 and California Office of Health Hazard Assessment guidance documents~~reference document~~ Emission Inventory Criteria Guidelines. The inventory report shall be submitted to the NCUAQMDistrict APCO no later than March 1<sup>st</sup> of the following calendar year. The inventory report is subject to NCUAQMDistrict APCO approval. [NCUAQMDistrict Rule 102 §5-0(E)]<sup>116</sup>

<sup>114</sup> Page 38 of Permit To Operate, Condition 129

<sup>115</sup> Page 38 of Permit To Operate, Condition 130

<sup>116</sup> Page 38 of Permit To Operate, Condition 131

### **AQ-150**

The District deleted **AQ-150**.

### **AQ-151**

The District deleted **AQ-151**.

### **AQ-152**

The District made the following minor administrative changes to **AQ-152** to reference the correct District Rules.

**AQ-152** Not later than 24 hours after determining that diesel mode operation is to occur as a result of an expected Nnatural Ggas 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 [~~NCUAQMDistrict~~ Rule 102 (E); PSD 2/09§5-0]:

- A. The anticipated start time and duration of operation in diesel mode under the Nnatural Ggas Curtailment; and
- B. The anticipated quantity of Diesel fuel expected to be burned under the Nnatural Ggas Curtailment.<sup>117</sup>

### **AQ-153**

The District made the following minor administrative changes to **AQ-153** to reference the correct District Rules.

**AQ-153** 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 [~~NCUAQMDistrict~~ Rule 102 (E); PSD 2/09§5-0]:

- A. The actual start time and end time of the period of diesel mode operation;

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<sup>117</sup> Page 38 of Permit To Operate, Condition 132

- 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.<sup>118</sup>

#### **AQ-154**

The District deleted **AQ-154**.

#### **AQ-155**

The District deleted **AQ-155**.

#### **AQ-156**

The District made the following minor administrative changes to **AQ-156**.

**AQ-156** Not less than thirty days prior to the date of any source test required by this Permit, the Permittee shall provide the NCUAQMDistrict APCO with written notice of the planned date of the test and a copy of the source test protocol.<sup>119</sup>

#### **AQ-157**

The District made the following minor administrative changes to **AQ-157**.

**AQ-157** Source test results shall be summarized in a written report and submitted to the NCUAQMDistrict 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 NCUAQMDistrict APCO no later than 60 days after the testing is completed.<sup>120</sup>

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<sup>118</sup> Page 38 of Permit To Operate, Condition 133

<sup>119</sup> Page 39 of Permit To Operate, Condition 136

<sup>120</sup> Page 39 of Permit To Operate, Condition 137

## **AQ-158**

The District made the following modifications to **AQ-158**. The modifications combine requirements from other conditions and clarify the testing requirements for Natural Gas Mode.

**AQ-158** The ~~P~~ermittee shall demonstrate compliance with the Natural Gas Mode all the emission limits via source testing conducted in accordance with the Test Methods listed below. For purposes of compliance with this condition, testing shall be conducted while the engines are operated in Natural Gas Mode, and shall be conducted at the intervals and at the operating loads specified in Condition #139.~~identified in this permit 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.~~B. Visible emissions. Permittee shall perform a “Visible Emission Evaluation” (VEE) concurrent with particulate matter testing. A CARB certified contractor shall perform such an evaluation.

~~D.~~C. Ammonia – Bay Area Air Quality Management District Source Test Procedure ST-1B.

~~E.~~D. Reactive organic gases – CARB Method 100.

~~F.~~E. Nitrogen oxides – CARB Method 100.

~~G.~~F. Carbon monoxide – CARB Method 100 ~~& ASTM D6522-00 [NESHAP ZZZZ].~~

~~H.~~G. Oxygen – CARB Method 100 ~~& ASTM D6522-00 [NESHAP ZZZZ].~~

i. Oxygen shall be measured at the inlet and outlet of the oxidation catalyst.

ii. Oxygen measurements shall be made at the same time as the CO measurements.

~~H.~~ 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.

~~K.~~ Liquid fuel sulfur content – ASTM D5453-93.<sup>121</sup>

### **NEW PTO CONDITION 139**

The District added a new Condition 139 in the PTO which is reproduced below.

New Condition 139. To demonstrate compliance with the Natural Gas Mode emission limits, reciprocating engines S- 1 through S-10 shall be tested on a rotating basis where each engine is: 1) Tested each year; 2) Tested while operating at one of the designated operating loads; and 3) Tested at all three operating loads with a three year period. The designated operating loads, plus or minus 2.5%, shall be 52.5%, 75%, and 95%. 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. [District Rule 102(E); PSD 2/09 amended 6/15]<sup>122</sup>

### **AQ-159**

The District made the following modifications to **AQ-159**. The modifications combine requirements from other conditions and clarify the testing requirements for Diesel Mode.

<sup>121</sup> Page 39 of Permit To Operate, Condition 138

<sup>122</sup> Page 39 of Permit To Operate, Condition 139

**AQ-159** The ~~Per~~mittee shall demonstrate compliance with ~~all~~ the Diesel Mode emission limits via source testing conducted in accordance with the Test Methods listed below. For purposes of compliance with this condition, testing shall be conducted while the engines are operated in Diesel Mode, and shall be conducted at the intervals and at the operating loads specified in Condition #141 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, 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. [~~NCUAQM District Rule 102 (E); PSD 2/09 amended 6/15~~§5-0]

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

~~A.B.~~ A.B. Diesel Particulate Matter-CARB Method 5 (front half only)

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

~~C.D.~~ C.D. Ammonia – Bay Area Air Quality Management District Source Test Procedure ST-1B.

~~D.E.~~ D.E. Reactive organic gases – CARB Method 100.

~~E.F.~~ E.F. Nitrogen oxides – CARB Method 100.

G. Carbon monoxide – CARB Method 100.

~~F.H.~~ F.H. COe shall be measured at the inlet and outlet of the oxidation catalyst.

~~G.I.~~ G.I. 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.~~

H. ~~Liquid Fuel Sulfur~~Natural gas fuel sulfur cContent – ASTM D5453-93324<sup>123</sup>

### **NEW PTO CONDITION 141**

The District added a new Condition 141 in the PTO which is reproduced below.

New Condition 141. To demonstrate compliance with the Diesel Mode emission limits, reciprocating engines S-1 through S-10 shall be tested on a rotating basis pursuant to Condition #140 where each engine is: 1) Tested while operating in Diesel Mode once every five years or following each 200 hours of operation of an individual engine in Diesel Mode whichever is sooner; 2) Tested while operating at one of the designated operating loads; and 3) Tested at all three designated operating loads with a 15 year period. The designated operating loads, plus or minus 2.5%, shall be 52.5%, 75%, and 95%. In addition, within 30 days of returning an engine to service after the completion of repair or maintenance activities, the Permittee shall conduct RATA testing on the affected engine's CEMs components. RATA testing shall be conducted in accordance with the applicable requirements of 40 CFR 60, Appendix B. The specific repair and maintenance activities triggering the RATA testing requirement shall be identified in the Facility's Device Maintenance & Replacement Plan. 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. [District Rule 102(E); PSD 2/09 amended 6/15]<sup>124</sup>

### **AQ-160**

The District deleted **AQ-160**.

<sup>123</sup> Page 140 of Permit To Operate, Condition 140

<sup>124</sup> Page 140 of Permit To Operate, Condition 141

### **AQ-161**

The District deleted **AQ-161**.

### **AQ-162**

The District deleted **AQ-162**.

### **AQ-163**

The District deleted **AQ-163**.

### **AQ-164**

The District made the following minor administrative changes to **AQ-154** to reference the correct District Rule.

**AQ-164** 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; [NCUAQMDistrict Rule 102 §5.0\(E\); PSD 2/09](#)]<sup>125</sup>

### **AQ-165**

The District made the following minor administrative changes to **AQ-165** to reference the correct District Rules.

**AQ-165** The permittee shall demonstrate compliance with the hourly, daily, and annual SOx emission limits [for reciprocating engines S-1 through S-10](#) 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. [[NCUAQMDistrict Rule 102 §5.0\(E\); PSD 2/09-PSD](#)]<sup>126</sup>

### **AQ-166**

The District made the following minor administrative changes to **AQ-166** to reference the correct District Rules.

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<sup>125</sup> Page 40 of Permit To Operate, Condition 142

<sup>126</sup> Page 40 of Permit To Operate, Condition 143

**AQ-166** The ~~P~~ermittee 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. [~~NCUAQMDistrict~~ Rule 102 ~~§5-0(E); PSD 2/09; PSD~~]<sup>127</sup>

#### **AQ-167**

The District made the following minor administrative changes to **AQ-167** to reference the correct District Rules.

**AQ-167** 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 ~~NCUAQMDistrict~~ 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 ~~NCUAQMDistrict~~ within 60 days after the testing was performed. [~~District Rule 102 (E); PSD 2/09~~]<sup>128</sup>

#### **AQ-168**

The District made the following minor administrative changes to **AQ-168**.

- AQ-168** 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 ~~V~~erification ~~P~~rocedure (as codified in ~~CCRCal. Code Regs., Title 13 Sections §2700-2710~~), or
  - C. CARB ~~D~~iesel ~~F~~uel used with fuel additives that meets the requirements of the ~~V~~erification ~~P~~rocedure (as

<sup>127</sup> Page 41 of Permit To Operate, Condition 144

<sup>128</sup> Page 41 of Permit To Operate, Condition 145

codified in ~~CCR Title 17, Code Regs., tit. 17~~ [Sections 2700-2710](#)), or

D. Any combination of a) through d) above.<sup>129</sup>

**AQ-169**

The District deleted **AQ-169**.

**AQ-170**

The District deleted **AQ-170**.

**AQ-171**

The District made the following minor administrative changes to **AQ-171** to correct the table references.

**AQ-171** The Emergency IC Diesel Generators S-11 and S-12 are authorized the following maximum allowable annual hours of operation as listed in Table [198.0](#) below [~~Cal. Code Regs., tit. 17 CCR -§93115~~]:<sup>130</sup>

**Table [198.0](#)**

**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

**NEW PTO CONDITION 149**

The District added a new Condition 149 in the PTO which is reproduced below.

[New Condition 149. The following equipment units and emissions are considered to be insignificant, and as such, are not required to obtain operating permits. However, these units and emission sources are required to comply with all applicable Federal and Local Enforceable Only general requirements and will be](#)

<sup>129</sup> Page 34 of Permit To Operate, Condition 121

<sup>130</sup> Page 34 of Permit To Operate, Condition 122

included in the facility's emission inventory. [District Rule 102 §4.13]<sup>131</sup>

**Table 21 - Insignificant Sources**

<u>Exempt Equipment / Emissions</u>
<u>Air Conditioning Units</u>
<u>Combustion Emissions from the Propulsion of Mobile Sources</u>
<u>Equipment Operated in Accordance with a Valid California Portable Equipment Registration (PERP)</u>
<u>Diesel Fire Pump Fuel Tank(s)</u>
<u>Diesel Fuel Dispensing Equipment</u>
<u>Distilled Oil Storage Tank(s)</u>
<u>Gasoline Dispensing Equipment (non-retail)</u>
<u>Lube Oil Tank(s)</u>
<u>Oil/Water Separator(s)</u>
<u>Portable Sandblasting Unit(s)</u>

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<sup>131</sup> Page 42 of Permit To Operate, Condition 149

**APPENDIX A**  
**Conditions of Certification**

## Revisions to Conditions of Certification

### PERMIT MODIFICATIONS AND RENEWAL

**AQ-1** The ~~P~~permittee shall submit to the Air Pollution Control Officer (APCO) a completed Title V permit application for renewal no earlier than September ~~17, 2014-16, 2016~~ (18 months prior to the expiration date of the Title V permit) and no later than September ~~17, 2012-16, 2017~~ (6 months prior to the expiration date of the Title V permit). [~~District Rule 502 §2.2; 40 CFR 70.5(a)(1)(iii)] ~~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 the Rules and Regulations of the North Coast Unified Air Quality Management District.~~<sup>1</sup>~~

**Verification:** No verification needed.

**AQ- 2** If modifications to the permit are necessary, the ~~P~~permittee 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 District. [NCUAQMD Rule 102] [NCUAQMD Reg V- Rule 502-§2.3] District Rule 502(B)(3); [40 C.F.R. 70.5(a)(1)(ii).]~~<sup>2</sup>

**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 ~~P~~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~~ later than 30 days after the end of the quarter during which the new requirement takes place (i.e., every three months). [40 CFR 70.5(b)]<sup>3</sup>

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

**AQ-4** ~~The permittee 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] Upon the discovery of inaccuracies contained within an application or supplement thereto, the Permittee shall immediately notify the APCO. The Permittee shall undertake action to correct the deficiency within the time frame specified by the APCO. [District Rule 502(E)(3); 40 CFR~~

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<sup>1</sup> [Page 11 Permit to Operate, Condition 1](#)

<sup>2</sup> [Page 11 Permit to Operate, Condition 2](#)

<sup>3</sup> [Page 11 Permit to Operate, Condition 3](#)

70.5(a)(2) and (b)]<sup>4</sup>

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

**AQ-5** Upon written request of the Air Pollution Control Officer, the ~~P~~ermittee shall supplement any complete application with additional information within the time frame specified by the ~~APCO~~Air Pollution Control Officer. [~~District Rule 502(E)(3); 40 CFR 70.5(a)(2) and (b)NGUAQMD Rule 103 Section 6.0]~~<sup>5</sup>

**Verification:** The project owner shall submit to both the district and CPM the 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. [NGUAQMD Regulation V Rule 504] When submitting an application for a permit pursuant to Regulation V, the Permittee 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<sup>st</sup> through June 30<sup>th</sup> and July 1<sup>st</sup> through December 31<sup>st</sup> of each year; statements on compliance status with any applicable enhanced monitoring; and annual compliance plans, no later than January 30<sup>th</sup> 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. [40 CFR 70.5(c)(9) and (d)]<sup>6</sup>~~

**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.

New Condition 7 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 District Regulation 5 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 five years. [District Rule 504(K); 40 CFR 70.6(a)(2)]<sup>7</sup>

## COMPLIANCE

**AQ-7** The ~~P~~ermittee shall comply with all conditions of the Title V permit. [NGUAQMD

<sup>4</sup> Page 11 Permit to Operate, Condition 4

<sup>5</sup> Page 11 of Permit to Operate, Condition 5

<sup>6</sup> Page 11 of Permit to Operate, Condition 6

<sup>7</sup> Page 11 of Permit to Operate, Condition 7

~~Rule 105 [NCUAQMD Rule 504 §2.7.]~~District Rule 5004(B)(7)]<sup>8</sup>

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

New Condition 9 ~~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. [District Rule 504(B)(7)(d)]~~<sup>9</sup>

**AQ-8** This Title V permit may be modified, revoked, reopened, and reissued or terminated for cause. ~~[NCUAQMD Rule 102]~~District Rule 503(I)]<sup>10</sup>

**Verification:** No verification needed.

**AQ-9** The permittee shall furnish to the ~~APCO~~Air Pollution Control Officer, within 10 (ten) days of the request, any information that the Air Pollution Control Officer ~~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 Title V Authority to Construct/PSD permit. Upon request, the ~~P~~permittee shall also furnish to the Air Pollution Control Officer ~~APCO~~ copies of records required to be kept by conditions of this permit. For information claimed to be confidential, the ~~P~~permittee may furnish such records ~~directly to the EPA~~ along with a claim of confidentiality. ~~[40 CFR 70.6(a)(6)(v)]~~District Rule 103 Section 6]<sup>11</sup>

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

**AQ-10** Noncompliance with any federally enforceable requirement in this Title V permit is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of the Title V permit renewal application. ~~[District Rule 504(B)(7)(c)]~~NCUAQMD Rule 102 Section 9]<sup>12</sup>

**Verification:** No verification needed.

**AQ-11** A pending Title V permit action (e.g. a proposed permit revision) or notification of anticipated noncompliance does not stay any permit condition. ~~[District Rule 504(B)(7)(e)]~~NCUAQMD Rule 102 Section 5.0]<sup>13</sup>

**Verification:** No verification needed.

**AQ-12** This ~~Authority to Construct/PSD~~Title V permit does not convey any property

<sup>8</sup> Page 12 of Permit to Operate, Condition 8

<sup>9</sup> Page 12 of Permit to Operate, Condition 9

<sup>10</sup> Page 12 of Permit to Operate, Condition 10

<sup>11</sup> Page 12 of Permit to Operate, Condition 11

<sup>12</sup> Page 12 of Permit to Operate, Condition 12

<sup>13</sup> Page 12 of Permit to Operate, Condition 13

rights of any sort or any exclusive privilege. [~~District Rule 504(B)(7)(b)]~~NCUAQMD Rule 102 Section 5.0]~~<sup>14</sup>~~

**Verification:** No verification needed.

- AQ-13** Upon presentation of credentials and other documents as may be required by law, the ~~P~~permittee shall allow the ~~APCO~~ Air Pollution Control Officer or an authorized representative to perform all of the following:
- a. Enter upon the stationary source's premises where this source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this ~~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. [~~District~~ NCUAQMD Rule 109 and Rule 504 §2.5]<sup>15</sup>

**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-14** Monitoring Reports

- a. The ~~P~~permittee shall submit to the ~~APCO~~ Air Pollution Control Officer 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 permit.
- b. The reporting periods for this permit shall be for the six month periods January 1<sup>st</sup> through June 30<sup>th</sup> and July 1<sup>st</sup> through December 31<sup>st</sup>. The reports shall be submitted by July 30<sup>th</sup> and March 1<sup>st</sup> of each year respectively.
- c. Any and all instances of deviations from 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. [~~District Rule 502(K) and~~ NCUAQMD Rule 103 Section 6] [~~NCUAQMD Rule 502 §11 and~~ Rule

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<sup>14</sup> Page 12 of Permit to Operate, Condition 14

<sup>15</sup> Page 12 of Permit to Operate, Condition 15

504(E); ~~§5 and ]~~ 40 C.F.R. 70.6(a)(3)(ii) and (iii).]<sup>16</sup>

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

**AQ-15** Compliance Reports

- a. The ~~P~~permittee shall submit to the ~~APCO~~ Air Pollution Control Officer 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 ~~P~~permittee's 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<sup>st</sup> through December 31<sup>st</sup>. The report shall be submitted by January 30<sup>th</sup> of each year. The initial report shall be for the period January 1<sup>st</sup> 2009 through December 31<sup>st</sup>, 2009 and shall be submitted by March 1<sup>st</sup>, 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:
  - i. The identification of each term or condition of the Title V ~~Authority to Construct/PSD~~ permit that is the basis of the certification.
  - ii. The method(s) used for determining the compliance status of the source, currently and over the reporting period, and whether such method(s) provides continuous or intermittent data.
  - iii. The status of compliance with the terms and conditions of the Title V ~~Authority to Construct/PSD~~ permit for the period covered by the certification, based on the method designated in Section D (~~ii~~2) of this condition.
  - iv. Such other facts as the ~~APCO~~ Air Pollution Control Officer may require in order to determine the compliance status of the source.
  - v. A method for monitoring the compliance of the stationary source with its emissions limitations, standards, and work practices. [~~NCUAQMD Rule 102 Section 5.0~~] [~~NCUAQMD Rule 504 § 10~~] District Rule 504(J); 40 CFR 70.6(b)(5)]<sup>17</sup>

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

<sup>16</sup> Page 13 of Permit to Operate, Condition 16

<sup>17</sup> Page 13 of Permit to Operate, Condition 17

**AQ-16** 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 Air Pollution Control Officer~~ by telephone followed by a written statement within seven (7) days describing the nature of the deviation from the federally enforceable permit condition. [NCUAQMD Rule 102 Section 5.0] ~~[NCUAQMD Rule 504 Section 5]~~ [District Rule 504(E); 40 C.F.R. 70.6(a)(3)(iii)]<sup>18</sup>

**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 permit condition.

**AQ-17** 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~~ electronic data 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] [NCUAQMD Rule 502 Section 10] [District Rule 502(J) and Rule 504(C); 40 C.F.R. 70.6(a)(3)(ii)]~~<sup>19</sup>

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

## **PUBLIC NUISANCE**

**AQ-18** 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] [District Rule 104(A)(1)]~~<sup>20</sup>

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

## **VISIBLE EMISSIONS**

**AQ-19** The ~~Powner, operator or permittee of this 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 aggragating more than three minutes in any one hour which is:

a. As dark or darker in shade as that designated No. 2 (3 minute average),

<sup>18</sup> Page 13 of Permit to Operate, Condition 18

<sup>19</sup> Page 14 of Permit to Operate, Condition 19

<sup>20</sup> Page 14 of Permit to Operate, Condition 20

[\[Type text\]](#)

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. [H&SC §41701] [NCUAQMD Rule 104 Section 2]<sup>21</sup>

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

**PARTICULATE MATTER**

**AQ-20** Particulate Discharge Limitation

- a. General Combustion Sources: The Permittee 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(K)-Section 11.0), as applicable.
- b. Steam Generating Units: The Permittee 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 [District Rule 104(K)].
- 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 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 listed in Rule 104 Table 1. [District Rule 104]:

**TABLE I**

<b>ALLOWABLE RATE OF EMISSION BASED ON PROCESS WEIGHT RATE</b>					
<b>Process Weight Rate</b>		<b>Emission</b>	<b>Process Weight Rate</b>		<b>Emission</b>
<b>Lb/Hr</b>	<b>Kg/Hr</b>	<b>Lb/Hr</b>	<b>Lb/Hr</b>	<b>Kg/Hr</b>	<b>Lb/Hr</b>
<b>100</b>	<b>45</b>	<b>0.55</b>	<b>6,000</b>	<b>2,720</b>	<b>8.6</b>

<sup>21</sup> Page 14 of Permit to Operate, Condition 21  
[\[Type text\]](#)

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	684	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. [NCUAQMD Rule 104]<sup>22</sup>~~

**Verification:** The project owner shall submit the results of source tests to both the district and CPM in accordance with Condition **AQ-159**.

**AQ-21** The ~~P~~ermittee shall not handle, transport, 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. [~~NGUAQMD District Rule 104(D)-Section-4~~]<sup>23</sup>

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

## SULFUR COMPOUNDS

**AQ-22** The ~~P~~ermittee(~~s~~) shall not discharge into the atmosphere from any single source of emissions sulfur oxides (calculated as sulfur dioxide (SO<sub>2</sub>)) in excess of 1,000 ppm; or in excess of the specific source emission limitations of Federal New Source Performance Standards, as applicable. [~~NGUAQMD District Rule 104(E)-Section-5~~]<sup>24</sup>

**Verification:** The project owner shall submit the results of source tests to both the district and CPM in accordance with Condition **AQ-159**.

## OPEN BURNING

**AQ-23** The ~~P~~ermittee 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

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<sup>23</sup> [Page 15 of Permit to Operate, Condition 23](#)

<sup>24</sup> [Page 15 of Permit to Operate, Condition 24](#)

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 Air Pollution Control Officer. [~~NCUAQMD-District~~ Rules 2001 & 2034.]<sup>25</sup>

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

## EQUIPMENT BREAKDOWNS

**AQ-24** The Permittee shall comply with the emergency provisions contained in all applicable federal requirements.

A. Within two working days of the emergency event, the Permittee shall notify the Air Pollution Control Officer with a description of the emergency and any mitigating or corrective actions taken. [District Rule 502 §9.0]

~~A.B.~~ Within two weeks of an emergency event, the owner(s), operator(s) or ~~permittee's~~ the responsible official shall submit to the ~~APCO~~ Air Pollution Control Officer a signed contemporaneous log or other relevant evidence which demonstrates that:

- i. An emergency occurred.
- ii. Identification of the cause(s) of the emergency.
- iii. The facility was being properly operated at the time of the emergency.
- iv. Identification of each and every step taken to minimize the emissions resulting from the emergency.

~~v. 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.C.~~ The Permittee has the burden of proof to establish that an emergency occurred in any enforcement proceeding. [~~NCUAQMD Rule 105 Section 5.0~~]<sup>26</sup>

**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-25** The Permittee shall not allow or cause the opening of appliances containing chlorofluorocarbons (CFCs) for maintenance, service, repair, or disposal unless first complying with the required practices set out 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

<sup>25</sup> Page 15 of Permit to Operate, Condition 25

<sup>26</sup> Page 16 of Permit to Operate, Condition 26

representatives of the district, ARB, and Commission upon request.

**AQ-26** 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-27** The ~~P~~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-28** The ~~P~~permittee 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-29** The ~~P~~permittee shall pay an annual permit fee and other fees as required in accordance with ~~NCUAQMD-District Regulation IV, Rule 406 Title V Fees Rules~~. Failure to pay these fees by the dates due will result in immediate suspension of this ~~Authority to Construct/PSD Title V Permit to Operate~~ effective on the date the fees were due, and on notification by the ~~APCO Air Pollution Control Officer~~ of such suspension. Operation without an effective ~~Authority to Construct/PSD Title V~~ permit subjects the ~~owner(s), operator(s) and P~~permittee(s) to potential enforcement action by the ~~NCUAQMD-District~~ and the U.S. EPA pursuant to ~~District Rules and~~ Section 502(a) of the Clean Air Act as amended in 1990. [~~NCUAQMD-District Regulation IV Rule 406~~]<sup>27</sup>

**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-15**).

## ACCIDENTAL RELEASES

**AQ-30** If subject to Section 112(r) of the Clean Air Act (CAA) and 40 C.F.R. Part 68, the permittee(s) 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

<sup>27</sup> [Page 16 of Permit to Operate, Condition 31](#)

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-31** If subject to Section 112(r) of the CAA and 40 C.F.R. Part 68, the **P**ermittee 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-32** If subject to Section 112(r) of the CAA and 40 C.F.R. Part 68, the **P**ermittee(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 CFR Part 68]<sup>28</sup>

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

- AQ-33** If subject to Section 112(r) of the CAA and 40 C.F.R. Part 68, the **P**ermittee(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<sup>th</sup> 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-34** 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 **P**ermittee shall notify the succeeding owner and operator of the existence of this permit and its **c**onditions by letter, a copy of which shall be forwarded to the **NGUAQMDDistrict**, 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–Air Pollution Control Officer** 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]<sup>29</sup>~~

**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-54**).

### SEVERABILITY

**AQ-35** 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]~~40 CFR 603.6(a)(5); District Rule 504(B)(8)]<sup>30</sup>

**Verification:** No verification needed.

## LOCAL ENFORCEABLE ONLY, GENERAL REQUIREMENTS

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### APPLICABILITY

~~**AQ-36** — The requirements outlined in this section are non-federally enforceable local permit requirements. [NCUAQMD Rule 102]~~

New Condition 39 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 Air Pollution Control Officer within 30 (thirty) days of transfer of ownership.<sup>31</sup>

**Verification:** No verification needed.

### ADMINISTRATION

**AQ-37** The ~~P~~permittee ~~of this 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~~Air Pollution Control Officer.<sup>32</sup>

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

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<sup>29</sup> Page 17 of Permit to Operate, Condition 36 and 37

<sup>30</sup> Page 17 of Permit to Operate, Condition 38 and Condition 40

<sup>31</sup> Page 18 of Permit to Operate, Condition 39

<sup>32</sup> Page 18 of Permit to Operate, Condition 41

**AQ-38** This permit is effective only upon payment of the ~~initial~~ permit fees set out in ~~NCUAQMD-District~~ Rules and Regulations.<sup>33</sup>

**Verification:** No verification needed.

### **ADMINISTRATION**

**AQ-39** This permit is issued pursuant to California Health and Safety Code Section 42300. Commencement of any act or operation authorized by this ~~P~~permit shall be conclusively deemed to be acceptance of all terms and conditions contained herein.

**Verification:** No verification needed.

**AQ-40** The ~~P~~permittee shall comply with all conditions of this permit. Any violation of any condition of this permit is a violation of ~~NCUAQMD-District~~ Rules and Regulations, and California State Law. [~~NCUAQMD-District~~ Rule 105 ~~(A)(§1.0.)~~]<sup>34</sup>

**Verification:** No verification needed.

**AQ-41** The permit conditions shall be liberally construed for the protection of the health, safety and welfare of the people of the ~~NCUAQMD~~District. [~~NCUAQMD-District~~ Rule 100 ~~(F)(3) §6.3; Rule 102 §5.0.~~]<sup>35</sup>

**Verification:** No verification needed.

**AQ-42** The ~~NCUAQMD-District~~ Rules and Regulations may be superseded or revised by the ~~NCUAQMD-District~~ Board with notice as required by state law. It is ~~P~~permittee's responsibility to stay current with Rules and Regulations governing its business. The ~~P~~permittee is therefore expected to comply with all applicable Rules and Regulations. [~~NCUAQMD-District~~ Rule 100 ~~(F) §6.0;~~ Rule 105 ~~(A) §1.0]~~<sup>36</sup>

**Verification:** No verification needed.

**AQ-43** 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)

<sup>33</sup> [Page 18 of Permit to Operate, Condition 42](#)

<sup>34</sup> [Page 18 of Permit to Operate, Condition 44](#)

<sup>35</sup> [Page 18 of Permit to Operate, Condition 45](#)

<sup>36</sup> [Page 18 of Permit to Operate, Condition 46](#)

and/or any subcontractor(s). [~~NCUAQMD-District~~ Rule ~~102105-§5.0~~]<sup>37</sup>

**Verification:** No verification needed.

**AQ-44** ~~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.] Prior to building, erecting, altering, or replacing any article, machine, equipment, or other contrivance where the use of said article may result in the discharge of air pollutants or in the reduction, elimination, or control of air pollutants, the Permittee shall obtain written authorization from the APCO. [District Rule 102]~~<sup>38</sup>

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

**AQ-45** Knowing and willful misrepresentation of a material fact in the application for the permit, or failure to comply with any condition of the ~~P~~permit, or of the ~~NCUAQMD-District~~ Rules and Regulations, or any state or federal law, shall be grounds for revocation of this permit. [~~NCUAQMD-District~~ Rule 102.]<sup>39</sup>

**Verification:** No verification needed.

**AQ-46** 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 ~~P~~permit. [~~NCUAQMD-District~~ Rule 104(A)(2)-§1.2.]<sup>40</sup>

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

**AQ-47** This permit does not convey any property rights of any sort, or any exclusive privilege.

**Verification:** No verification needed.

**AQ-48** The "Right of Entry", as delineated in ~~NCUAQMD-District~~ Rule 109(A)-§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~~District, CARB, or other authorized personnel shall be grounds for permit suspension or revocation.<sup>41</sup>

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

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<sup>37</sup> [Page 18 of Permit to Operate, Condition 47](#)

<sup>38</sup> [Page 19 of Permit to Operate, Condition 48](#)

<sup>39</sup> [Page 19 of Permit to Operate, Condition 49](#)

<sup>40</sup> [Page 19 of Permit to Operate, Condition 50](#)

<sup>41</sup> [Page 19 of Permit to Operate, Condition 52](#)

**AQ-49** 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.<sup>42</sup>

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

~~**AQ-50** — 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 shall prevail. [NCUAQMD Rule 100-§6.3; NCUAQMD Rule 102-§5.0.]~~

**Verification:** No verification needed.

**AQ-51** 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.]<sup>43</sup>~~

**Verification:** No verification needed.

**AQ-52** This permit shall be posted in a conspicuous location at the site and shall be made available to NCUAQMD-District representatives upon request. [NCUAQMD Rule 102 §8.0.]<sup>44</sup>

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

**AQ-53** The permittee shall pay an annual permit fee and other fees as required in accordance with NCUAQMD-District 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 NCUAQMDDistrict. 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-District Regulation IV – Fees.]<sup>45</sup>~~

**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-15**).

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<sup>42</sup> Page 19 of Permit to Operate, Condition 53

<sup>43</sup> Page 19 of Permit to Operate, Condition 54

<sup>44</sup> Page 19 of Permit to Operate, Condition 55

<sup>45</sup> Page 19 of Permit to Operate, Condition 56

**AQ-54** 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 ~~P~~permittee shall notify the succeeding owner of this permit and its conditions; and shall notify the ~~NCUAQMD District~~ of the change in control or ownership within fifteen (15) days of that change. [~~NCUAQMD District Rule 400(E) §5.0.~~]<sup>46</sup>

**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-34**).

**AQ-55** 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 District Rule 400(E) §5.0; Rule 102 §5.0.~~]<sup>47</sup>

**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-34**).

**AQ-56** For purposes of this ~~P~~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. [~~NCUAQMD Rule 102 §5.0.~~]<sup>48</sup>

**Verification:** No verification needed.

## **EMISSIONS & OPERATION**

**AQ-57** 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 District~~. This permit shall not be considered as permission to violate existing laws, ordinances, regulations or statutes of other governmental agencies.<sup>49</sup>

**Verification:** No verification needed.

**AQ-58** ~~The~~ 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

<sup>46</sup> [Page 19 of Permit to Operate, Condition 57](#)

<sup>47</sup> [Page 20 of Permit to Operate, Condition 58](#)

<sup>48</sup> [Page 20 of Permit to Operate, Condition 59](#)

<sup>49</sup> [Page 20 of Permit to Operate, Condition 60](#)

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&SC §41700; ~~NCUAQMD-District Rule 104(A)(1)-§1.1.~~]<sup>50</sup>

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

**AQ-59** 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 in excess of twenty (20) percent opacity, or as dark or darker in shade as that designated as No. 12 on the Ringelmann Chart, - calculated as a six minute average. Opacity observations shall be taken and recorded as described in EPA Reference Method 9, 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-District Rule 104(D)-§2.0~~]<sup>51</sup>

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

**AQ-60** 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-District Rule 104(D)-§4.0.~~]

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

**AQ-61** 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 Ppermit. [~~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-62** The permittee shall provide training and instruction to all affected contractor(s), subcontractor(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

<sup>50</sup> Page 20 of Permit to Operate, Condition 61

<sup>51</sup> Page 20 of Permit to Operate, Condition 62

documenting the persons receiving instruction and the instruction materials shall be made available to the APCO upon request. [~~NCUAQMD-District~~ Rule 1025-§5.0.]<sup>52</sup>

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

**AQ-63** Permittee shall furnish to the APCO, within a reasonable time, any information that the ~~NCUAQMD-District~~ may request to determine compliance with this ~~P~~permit or whether cause exists for modifying, revoking and reissuing, or terminating this permit. Upon request, ~~P~~permittee shall also furnish to the ~~NCUAQMD-District~~ copies of records required to be kept by this permit. The records shall be submitted within the time period determined by the APCO. [HCH&SC §42303; NCUAQMD Rule 103(F)-§6.0, Rule 102-§5.0]<sup>53</sup>

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

New Condition 67      The Permittee shall record the following information in the event of an equipment breakdown or malfunction of Authorized Equipment which creates, causes, or results in a violation any emission limitation or restriction prescribed by District Rules or State law: date and time of event; event duration; a description of event; the cause of the event; what corrective measures were taken, including what actions were taken to prevent re-occurrence; if corrective actions were unsuccessful, what additional measures should be taken in the future; and the quantity of excess emissions released during the event. The Permittee shall report the information listed above to the District within 10 days of when the breakdown event was corrected. If the Permittee reports the event to the District in within one hour of its detection pursuant to Rule 105(E)(2), the APCO may elect to not take enforcement action if the requirements of Rule 105(E) are satisfied. [District Rule 105(E)]

## PERMIT TERM

**AQ-64** Title V permit expiration terminates the ~~P~~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(B)(2)-§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. [~~District Rule 502(A)(2)40 CFR 70.7(e) (1) (ii)~~]<sup>54</sup>

**Verification:** No verification needed.

~~**AQ-65** — The authorization for equipment installation and construction activities—~~

<sup>52</sup> Page 21 of Permit to Operate, Condition 65

<sup>53</sup> Page 21 of Permit to Operate, Condition 66

<sup>54</sup> Page 21 of Permit to Operate, Condition 68

~~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-66** — 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**

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### **AUTHORIZED EQUIPMENT**

~~**AQ-67** 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. 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 1.1 below. This permit authorizes the operation of the equipment and specific components listed in Table 1 and 2. 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 District Rule 504(B)(1) §2.1.]<sup>55</sup>~~

**Table 1.0 - Authorized Emission Devices (Humbolt Bay Generating Station)**

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	<del>Caterpillar C-15 Diesel-fired Emergency IC Engine, serial number FSE02399, powering an emergency generator</del> <del>Caterpillar DM8149 (or equivalent) Diesel-fired Emergency Reciprocating IC Engine powering a 350kW electrical generator</del>	<del>469,546</del> HP
S-12	<del>Cummins CFP9E-F20 Diesel-fired Emergency IC Engine, serial number 73070231, powering a fire water pump</del> <del>Clarke/John Deere JU6H-UF50 (or equivalent) Diesel-fired Emergency Reciprocating IC Engine powering a fire water pump</del>	<del>26840</del> HP

**Table 1.12 Authorized Control Devices**

[Type text]

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

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

**AQ-68** 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 3.2.0, Table 2.1, or Table 2.2. [NCUAQMD Rule 102 §5.0.] Further, Natural Gas Mode heat input shall be the sum of the Higher Heating Values of the natural gas and diesel supplied. The diesel pilot heat input (total diesel supplied) for each engine shall not exceed 2.0 MMBtu/hr calculated on a three hour rolling average basis. [District Rule 102(E); 17 CCR §93115 PSD 2/09]~~<sup>56</sup>

**Table 2.03**  
**S-1 Through S-120 Engine Specifications**

Primary Fuel	Natural Gas
Backup Fuel	CARB Diesel
Design Ambient Temperature	67.5 °F
Nominal Heat Input Rate (HHV)	<del>144.743.9 MMBtu/hr natural gas plus 0.79 MMBtu-pilot fuel (natural gas mode) —OR—</del> 148.9 MMBtu/hr CARB Diesel Fuel <del>(diesel mode)</del>
Nominal Exhaust Temperature	728°F

<sup>56</sup> [Page 23 of Permit to Operate, Condition 70](#)

Nominal 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 3 Continued.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 2.2**  
**S-12 Engine Specifications**

Primary Fuel	CARB Diesel
Nominal Heat Input Rate (HHV)	1. <del>9468</del> MMBtu/hr
Heat Input, gal/hr	1 <del>4.22-3</del>
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-69** The **P**ermittee shall only fire reciprocating engines S-1 through S-10 with fuel which meets or exceeds the fuel specifications identified in tables ~~42-3~~. Prior to firing reciprocating engines S-1 through S-10 with an **A**lternative **F**uel or CARB Diesel with additives, the **P**ermittee 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 **P**ermittee 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-District~~ Rule 102(E); PSD 2/09-§5.0]<sup>57</sup>

<sup>57</sup> [Page 24 of Permit to Operate, Condition 71](#)  
[\[Type text\]](#)

**Table 2.34**  
**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

**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-70** 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 for natural gas fuel meters, and once every 24 months for diesel fuel flow meters. Measuring devices shall be tested/calibrated at more frequent intervals if necessary to ensure compliance with the 1% accuracy requirement. [District Rule 102(E); PSD 2/09<sup>58</sup>] ~~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-71** The exhaust stacks shall not be fitted with rain caps or any other similar device which would impede vertical exhaust flow. ~~[NCUAQMD-District Rule 102(E); PSD 2/09-§5.0]<sup>59</sup>~~

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

**AQ-72** 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-District Rule 102(E) §5.0]<sup>60</sup>~~

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

**AQ-73** 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

<sup>58</sup> [Page 24 of Permit to Operate, Condition 72](#)

<sup>59</sup> [Page 24 of Permit to Operate, Condition 73](#)

<sup>60</sup> [Page 25 of Permit to Operate, Condition 74](#)

~~V~~erification ~~P~~rocedure (as codified in CCR Title 13 Sections 2700-2710), or

c. CARB ~~D~~iesel ~~F~~uel used with fuel additives that meets the requirements of the ~~V~~erification ~~P~~rocedure (as codified in CCR Title 13 Sections 2700-2710), or

d. Any combination of a) through ~~c~~) above.<sup>61</sup>

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

~~AQ-74 — 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-75 — 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-76 — 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-77 — The permittee's request for approval of an equivalent engine shall be submitted to the NCUAQMD at least thirty (30) days prior to the planned installation date. The permittee shall also notify the NCUAQMD at least ten (10) 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 thirty (30) days prior to the planned installation date.

**AQ-78** The ~~P~~ermittee shall install exhaust gas temperature monitoring devices at

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<sup>61</sup> [Page 25 of Permit to Operate, Condition 75](#)

[\[Type text\]](#)

the inlet and the outlet of the oxidation catalyst. [40 C.F.R. §63.6625; [PSD 2/09 BACT](#)]<sup>62</sup>

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

**AQ-79** 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 [tested](#)/calibrated at least once every twelve months or at more frequent intervals if necessary to ensure compliance with the ~~1% percent~~-requirement. [[NCUAQMD-District Rule 102\(E\); PSD 2/09-§5.0](#)]

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

**AQ-80** The ~~P~~ermittee shall install points of access to the ~~E~~mission ~~D~~evices, ~~C~~ontrol ~~D~~evices, and ~~C~~ontinuous ~~E~~mission ~~M~~onitoring ~~D~~evices 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 ~~S~~ection of this ~~P~~ermit; and the collection of gas samples with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> 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-District Rule 102\(E\); PSD 2/09-§5.0](#)]<sup>63</sup>

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

**AQ-81** Each reciprocating engine S-1 through S-10 shall be equipped with a continuous emission monitor (CEM) for NO<sub>x</sub>, CO, and O<sub>2</sub>. Continuous emissions monitor(s) shall meet the requirements of 40 C.F.R. part 60, Appendices B and F, and [NCUAQMDDistrict](#)-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 ~~S~~startup and ~~S~~shutdown periods. [[NCUAQMD-District Regulations Appendix B; PSD 2/09](#)]<sup>64</sup>

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

**AQ-82** The permittee shall demonstrate compliance with the ammonia slip limit by using the following calculation procedure: The ammonia injection rate to each SCR control system shall be continuously recorded. Correlations

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<sup>62</sup> [Page 25 of Permit to Operate, Condition 76](#)

<sup>63</sup> [Page 25 of Permit to Operate, Condition 78](#)

<sup>64</sup> [Page 25 of Permit to Operate, Condition 79](#)

between the engine heat input rates, the SCR system ammonia injection rates, and corresponding ammonia emission concentration shall be determined for each fuel in accordance with the Testing and Compliance Monitoring section of this permit. 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-District Rule 103(F)-§6.0]<sup>65</sup>

**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-83** — 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 PM<sub>4.0</sub> 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 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. [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 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
PM <sub>4.0</sub>	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 CONDITIONS

**AQ-84** 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 CO<sub>2</sub> at standard conditions. [NCUAQMD-District Rule 104(C)(1)-§3.4]<sup>66</sup>

**Verification:** The project owner shall submit the results of source tests to both the

<sup>65</sup> [Page 25-26 of Permit to Operate, Condition 80](#)

<sup>66</sup> [Page 26 of Permit to Operate, Condition 81](#)

district and CPM in accordance with condition **AQ-159**.

**AQ-85** 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. [~~NGUAQMD-District Rule 104(E)-§5.0~~]<sup>67</sup>

**Verification:** The project owner shall submit the results of source tests to both the district and CPM in accordance with condition **AQ-159**.

**AQ-86** 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 aggregating 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.~~ [~~NGUAQMD District Rule 104(B)(3)2-§5.0~~]<sup>68</sup>

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

**AQ-87** The ~~P~~permittee shall not operate reciprocating engines S-1 through S-12 such that the emissions of NOx, from a combination of all engines, exceeds 392 lbs per hour. Furthermore, ~~except during the commissioning period,~~ the ~~P~~permittee shall not operate reciprocating engines S-1 through S-10 such that more than 2 units are in a ~~D~~iesel ~~S~~startup ~~P~~period during any one clock hour. [~~District Rule 102(E); PSD 2/09~~]<sup>69</sup>

**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-88** The permittee shall not discharge diesel particulate matter from reciprocating engines S-1 through S-10 while operating in ~~D~~iesel ~~M~~mode such that emissions of ~~D~~iesel ~~P~~particulate ~~M~~matter exceed 0.11 g/bhp-hr for each engine. [NSPS 40 CFR Part 60 Subpart IIII]<sup>70</sup>

**Verification:** The project owner shall submit the results of source tests to both the district and CPM in accordance with condition **AQ-159**.

**AQ-89** 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% O<sub>2</sub>. [40 C.F.R. 63 Subpart ZZZZ, District Rule 110]<sup>71</sup>

**Verification:** The project owner shall submit the results of source tests to both the district and CPM in accordance with condition **AQ-159**. A summary of significant operation and maintenance events and monitoring records required shall be included in

<sup>67</sup> [Page 26 of Permit to Operate, Condition 82](#)

<sup>68</sup> [Page 26 of Permit to Operate, Condition 83](#)

<sup>69</sup> [Page 26 of Permit to Operate, Condition 84](#)

<sup>70</sup> [Page 26 of Permit to Operate, Condition 85](#)

<sup>71</sup> [Page 26 of Permit to Operate, Condition 86](#)

the semi-annual operational report (AQ-SC9).

## HEAT INPUT & FUEL LIMITATIONS

### Engines S-1 Through S-10

~~a. AQ-90~~ 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 ~~4.05~~ on a per engine basis. Further, the Permittee shall not operate S-1 through S-10 such that diesel pilot heat input per engine exceeds 2.0 MMBtu/hr on a rolling three hour average basis. [District Rule 102(E); 17 CCR §93115; PSD 2/09 [NCUAQMD Rule 102 §5.0]]<sup>72</sup>

**Table ~~54.0~~**  
**Heat Input Limitations Per Engine**

Each Unit <sup>4</sup>		Heat Input, MMBtu (HHV)	
		Hourly (3 hr rolling average)	Daily (Calendar Day)
Natural Gas Mode <sup>2</sup>	Natural Gas	14 <del>43.79</del>	3,4 <del>7354</del>
	<del>Diesel (Pilot)</del>	<del>0.8</del>	<del>19</del>
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-91** 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 ~~4.16~~ below calculated as a sum of all 10 engines. Further, while operating in Natural Gas Mode, the percentage of heat input derived from diesel shall not exceed 5% on an annual basis (calendar year). [District Rule 102(E); 17 CCR §93115; PSD 2/09] ~~Fuel combusted during compliance testing shall not accrue toward the limitations established in this condition. [NCUAQMD Rule 102 §5.0]]<sup>73</sup>~~

**Table ~~64.4~~**  
**Heat Input Limitations S-1 Through S-10 Engines Combined**

Sum of All 10 Units	Heat Input, MMBtu (HHV)
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<sup>72</sup> [Page 26 of Permit to Operate, Condition 87](#)

<sup>73</sup> [Page 27 of Permit To Operate, Condition 88](#)

		Hourly Annual (Calendar Year)	
Natural Gas Mode <sup>1</sup>	Natural Gas	1,439	
	Diesel Pilot	34,536	9,328,809
		9,277,233 <sup>2</sup>	
		7.9	
		190	
Diesel Mode	Diesel	51,576	
		1,489	148,900
		—	—

**Notes:**

- 1) Total heat input in natural gas mode is the sum of natural gas and diesel pilot.

**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-92** The permittee shall not exceed the diesel fuel firing limits while operating reciprocating engines S-1 through S-10 in the modes listed in Tables 7 and 8 below. ~~Fuel combusted during compliance testing shall not accrue toward the limitations established in this condition.~~ [District NCUAQMD Rule 102 §5.0€ PSD 2/09]<sup>74</sup>

A. Natural Gas Mode.

**Table 74.2**  
**Diesel Fuel Firing Limitations (Pilot)**

Engines S-1 Through S-10	Gallons of Diesel Fuel		
	Hourly 3 hr rolling average	Daily (Calendar Day)	Annual 365 day rolling average
All Combined	14658	3,5041,402	948,562376,

B. Diesel Mode.

**Table 84.3**  
**Diesel Fuel Firing Limitations**

Engines S-1 Through S-10	Gallons of Diesel Fuel		
	Hourly 3 hr rolling average	Daily (Calendar Day)	Annual 365 day rolling average
Per Engine	1.088	26.106	—
All Combined	10,876	221,877	1,087,630

<sup>74</sup> Page 27 of Permit To Operate Condition, 89  
[Type text]

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

POLLUTANT LIMITATIONS

**S-1 – S-10 Startup & Shutdown Periods**

**AQ-93** The Ppermittee shall not operate reciprocating engines S-1 through S-10, such that they individually discharge pollutants exceeding the limits identified in Table 9 below during Sstartup or Sshutdown periods. [NCUAQMDDistrict Rule 102 (E); PSD 2/09)§5.0]<sup>75</sup>

**Table 95.0  
Start & Shutdown Period Emission Limits**

Mode of Operation	Pollutant				
	NOx	CO	ROC	PM10	SOx
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-94** The Ppermittee shall not operate reciprocating engines S-1 through S-10, such that they individually discharge pollutants exceeding the limits identified in Table 105.4 below based upon a three (3) hour average with the exception of NOx which shall be based upon a one (1) hour average. The limits shall not apply during Sstartup or Sshutdown periods. [40 C.F.R. 63.6(f)(1), NCUAQMDistrict Rule 102(E); PSD 2/09-§5.0]<sup>76</sup>

**Table 105.4  
Natural Gas Mode Emission Limits—per engine**

Pollutant	Emission Rate (per engine)		
	ppmvd @ 15% O <sub>2</sub>	lb/hr	lb/MMBtu
CO	13	4.13	0.029
NH <sub>3</sub>	10	1.9	0.013
NOx	6.0	3.1	0.022
PM <sub>10</sub>	-	3.6	-
ROC	28	5.1	0.035
Sox	-	0.40	0.0028

**Verification:** A summary of significant operation and maintenance events and

<sup>75</sup> Page 28 of Permit To Operate, Condition 90

<sup>76</sup> Page 28 of Permit To Operate, Condition 91

monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

**AQ-95** The combined discharge of pollutants, from the reciprocating engines S-1 through S-10 shall not exceed the limits listed in Table 115.2 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 District Rule 102 §5.0(E); PSD 2/9]<sup>77</sup>

**Table 511.2  
S-1 Through S-10 Combined Natural Gas Mode Daily Limits**

Pollutant	Emission Rate lb/Day
CO	1,589
NH <sub>3</sub>	456
NOx	1,360
PM <sub>10</sub>	864
ROC	1,608
SOx	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-96** 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 125.3 below. The limits shall not apply during Startup or Shutdown periods. [District Rule 102 (E); 40 C.F.R. 63.6(f)(1), NCUAQMD Rule 102-§5.0PSD 2/09.]<sup>78</sup>

**Table 125.3  
Diesel Mode Emission Limits – per engine**

Pollutant	Emission Rate (per engine)		
	ppmvd @ 15% O <sub>2</sub>	lb/hr	lb/MMBtu
CO	20.0	6.9	0.047
NH <sub>3</sub>	10	2.1	0.014
NOx	35.0	19.9	0.134
PM <sub>10</sub>	-	<del>5.5</del> 40.8	0.137
ROC	40.0	7.9	0.053
SOx	0.40	0.22	0.0016

**Verification:** A summary of significant operation and maintenance events and

<sup>77</sup> Page 29 of Permit To Operate, Condition 92

<sup>78</sup> Page 29 of Permit To Operate, Condition 94

monitoring records required shall be included in the semi-annual operational report (AQ-SC9).

**AQ-97** The discharge of ~~D~~diesel ~~P~~particulate ~~M~~atter into the atmosphere from the reciprocating engines S-1 through S-10 while in ~~D~~diesel ~~M~~ode shall not exceed the emission limits identified in Table ~~135.4~~ below. ~~The limits shall not apply during the commissioning period as defined in this permit.~~  
~~[District NCUAQMD Rule 102 (E); PSD 2/09§5.0]~~<sup>79</sup>

**Table ~~135.4~~**  
**Diesel Particulate Matter Limitations**

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

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 ~~145.5~~ below during any ~~ce~~alendar ~~De~~lay in which one or more of the engines are operated in diesel mode for any period of time. ~~[District Rule 102(E); PSD 2/09]~~<sup>80</sup>

**Table ~~514.5~~**  
**S-1 Through S-10 Combined Diesel Mode Daily Limits**

Pollutant	Emission Rate (lb/Day)
CO	2,219
NH <sub>3</sub>	506
NOx	9,103
PM10	1,542
ROC	2,183
SOx	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 the~~

<sup>79</sup> Page 30 of Permit To Operate, Condition 95

<sup>80</sup> Page 30 of Permit To Operate, Condition 96

~~engines such that their combined hours of operation in diesel mode exceed 142 hours per calendar 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-99** 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 155.6 below. [NCUAQMDistrict Rule 102 (e); PSD 2/09§5.0]<sup>81</sup>

**Table 155.6**  
**S-1 Through S-10 Combined Annual Emission Limits**

Pollutant	Emission Rate Tons/Yr
CO	172.7
NH <sub>3</sub>	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-100** The Permittee shall not operate reciprocating engines S-11 and S-12 such that pollutant discharge into the atmosphere exceeds the quantities in Table 165.7 below. [NCUAQMD Rule 102 (E)§5.0]<sup>82</sup>

**Table 165.7**  
**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
	CO	0.59	.27
	DPM	0.14	0.06
	NOx	4.9	2.27

<sup>81</sup> [Page 30 of Permit To Operate, Condition 98](#)

<sup>82</sup> [Page 31 of Permit To Operate, Condition 99](#)

S-12 Fire Pump	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-101** 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 175.8 below. [NCUAQMDistrict Rule 102 (E)§5.0]<sup>83</sup>

**Table 175.8  
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-15).

**STARTUP COMMISSIONING & SIMULTANEOUS OPERATION**

~~**AQ-102** The permittee shall discontinue operation of permit units 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. [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~~

<sup>83</sup> Page 31 of Permit To Operate, Condition 100  
[Type text]

~~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-105**—In accordance with the NCUAQMD approved commissioning plan required under the Startup, Commissioning & Simultaneous Operation section of this permit, 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-103**.~~

~~**AQ-106**—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-107**—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 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) at Humboldt Bay Power Plant within 180 days after initial startup of the new reciprocating engines.~~

~~**AQ-108**—Selective catalytic reduction (SCR) systems and oxidation catalysts shall serve each of the reciprocating engines S-1 through S-10 except as provided for in the district-approved commissioning plan required under the Startup, Commissioning & Simultaneous Operation section of this permit. 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 less than 90 days prior to scheduled delivery.~~

~~**AQ-109**—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-110**—In accordance with the NCUAQMD approved commissioning plan required under the Startup, Commissioning & Simultaneous Operation section of this permit, 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-103**.~~

~~**AQ-111**—The continuous monitors specified in the Authorized Equipment section of this permit 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~~

[Type text]

~~representatives of the district, ARB, and Commission upon request.~~

~~**AQ-112**—The permittee shall record and monitor the parameters identified in Table 7.1 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 NO<sub>x</sub> 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-113**—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 GPM and APCO for approval the commissioning plan as required in **AQ-103**.~~

~~**AQ-114** 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. Fire more than five uncontrolled reciprocating engines simultaneously.~~

~~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:~~

~~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-103**.~~

~~**AQ-115** During the commissioning period, 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**

<b>Pollutant</b>	<b>lbs/hr</b>	<b>lbs/day</b>
CO	197.2	2,662
NO <sub>x</sub>	<b>392</b>	4,365
PM <sub>40</sub>	54	1,296
ROC (as Methane)	86.6	1,559
SO <sub>x</sub> (SO <sub>2</sub> )	2.0	48.4

~~**Verification:** The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-103**.~~

~~**AQ-116** 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 NO<sub>x</sub> and CO emissions from that reciprocating engine shall thereafter comply with the limits specified in the Pollutant Limitations section of this permit. 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 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-103**.~~

~~**AQ-117**—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-103**.~~

~~**AQ-118**—The total mass emissions of NO<sub>x</sub>, CO, ROG, PM<sub>10</sub>, and SO<sub>x</sub> 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. [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-103**.~~

~~**AQ-119**—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 40 C.F.R. 63 Subpart ZZZZ compliance plan no less than 90 days before operation. 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-120**—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 NO<sub>x</sub> 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 40 C.F.R. 60 Subpart IIII compliance plan no less than 90 days before operation. 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-121** In the event of an excess emission incident, regardless of the cause, the ~~P~~permittee shall ~~take~~ immediately ~~take~~ corrective action to minimize the release of excess emissions. Notice shall be provided to the ~~District~~ ~~NCUAQMD~~ as indicated in the Reporting and Recordkeeping ~~S~~section of this ~~P~~permit. For purposes of compliance with this condition, excess emissions shall mean discharge of pollutants in quantities which exceed those authorized by Federal, State, ~~District~~ Rules, and this ~~P~~permit. [40 C.F.R. 70.6(a)(3)(iii)(B); NCUAQMD Rule 105~~§5.0.~~]<sup>84</sup>

**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-122** All equipment listed in Table 1.0 Authorized Emission Devices and ~~Table 24.4~~ Authorized Control Devices shall be operated and maintained by the ~~P~~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 (E); PSD 2/09-§5.0~~]<sup>85</sup>

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

**AQ-123** The ~~P~~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 ~~P~~permittee shall not operate the reciprocating engines S-1 through S-12 and their associated control devices unless a ~~NCUAQMD~~~~district~~ 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.~~ [~~District~~ ~~NCUAQMD~~-Rule 102 ~~(E); PSD 2/09§5.0~~]<sup>86</sup>

<sup>84</sup> [Page 31 of Permit To Operate, Condition 101](#)

<sup>85</sup> [Page 32 of Permit To Operate, Condition 102](#)

<sup>86</sup> [Page 32 of Permit To Operate, Condition 103](#)

**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-124** The ~~p~~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 ~~P~~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 ~~p~~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 (60) calendar days following expiration of the commissioning period for any of reciprocating engines S-1 through S-10.~~ The ~~P~~plan is subject to APCO approval. The ~~P~~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~~district approved Device Operational Plan is in effect. [~~NCUAQMD~~district Rule 102 (E); PSD 2/09 §5.0]<sup>87</sup>

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

**AQ-125** The ~~P~~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 ~~p~~Plan is subject to APCO approval. The ~~P~~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 ~~District~~NCUAQMD approved Device Maintenance & Replacement Plan is in effect. [~~NCUAQMD~~district Rule 102 (E); PSD 2/09 §5.0]<sup>88</sup>

**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.

<sup>87</sup> [Page 32 of Permit To Operate, Condition 104](#)

<sup>88</sup> [Page 32 of Permit To Operate, Condition 105](#)

**AQ-126** 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. [NCUAQMDistrict Rule 102 (E); PSD 2/09~~§5.0~~]<sup>89</sup>

**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-127** The Permittee shall not operate reciprocating engines S-1 through S-10 such that Sstartup Periods exceed 60 minutes in length. ~~This limitation shall not apply during the commissioning period.~~ [NCUAQMDistrict Rule 102 (E); PSD 2/09~~§5.0~~]<sup>90</sup>

**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-128** The Permittee shall not operate reciprocating engines S-1 through S-10 such that Sshutdown Periods exceed 30 minutes in length. ~~This limitation shall not apply during the commissioning period.~~ [NCUAQMDistrict Rule 102~~§5.0~~](E); PSD 2/09<sup>91</sup>

**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-129** The Permittee shall not operate the reciprocating engines S-1 through S-10 such that the combined hours of operation during Sstartup and Sshutdown Periods exceeds 30 engine-hours per day. ~~This limitation shall not apply during the commissioning period.~~ [NCUAQMDistrict Rule 102 (E); PSD 2/09~~§5.0~~]<sup>92</sup>

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

**AQ-130** The Permittee shall not operate the reciprocating engines S-1 through S-10 such that the combined hours of operation during Sstartup and Sshutdown Periods exceeds 3,650 engine-hours per calendar year. Of the 3,650 engine hours available, the hours of operation during Sstartup and Sshutdown 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.~~ [NCUAQMDistrict Rule 102-~~§5.0~~](E); PSD 2/09<sup>93</sup>

<sup>89</sup> [Page 32 of Permit To Operate, Condition 106](#)

<sup>90</sup> [Page 32 of Permit To Operate, Condition 107](#)

<sup>91</sup> [Page 33 of Permit To Operate, Condition 108](#)

<sup>92</sup> [Page 33 of Permit To Operate, Condition 109](#)

<sup>93</sup> [Page 33 of Permit To Operate, Condition 110](#)

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

**AQ-131** The Permittee shall not operate any of the reciprocating engines S-1 through S-10 below 50 percent load except during Sstartup and Sshutdown Periods. ~~This limitation shall not apply during the commissioning period.~~ [NCUAQMDistrict Rule 102 (E); PSD 2/09§5.0]<sup>94</sup>

**Verification:** A summary of engine operations below 50 percent load shall be included in the semi-annual operational report (**AQ-SC9**).

**AQ-132** 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.~~ [NCUAQMDistrict Rule 102 §5.0(E); PSD 2/09]<sup>95</sup>

**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 shall be included in the semi-annual operational report (**AQ-SC9**).

**AQ-133** 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 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.<sup>96</sup>

**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-134** 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. This Condition shall not apply during Startup and Shutdown Periods. [40 C.F.R. 63 Subpart

<sup>94</sup> [Page 33 of Permit To Operate, Condition 111](#)

<sup>95</sup> [Page 33 of Permit To Operate, Condition 112](#)

<sup>96</sup> [Page 33 of Permit To Operate, Condition 113](#)

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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-135** The P~~er~~mittee 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 ~~S~~startup— or ~~S~~shutdown P~~er~~iods, ~~during the commissioning period, or during malfunctions.~~ [40 C.F.R. 63 Subpart ZZZZ]<sup>98</sup>

**Verification:** A summary of significant operation and maintenance events and monitoring records required (AQ-146) shall be included in the semi-annual operational report (AQ-SC9).

**AQ-136** The P~~er~~mittee 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]<sup>99</sup>

**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-137** The P~~er~~mittee 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 ~~186.0~~ below [~~NCUAQM District Rule 102 (E)§5.0~~]<sup>100</sup>

**Table 186.0**  
**S-11 and S-12 Hourly Operating Limits**

Device	Daily	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> 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

<sup>97</sup> [Page 33 of Permit To Operate, Condition 114](#)

<sup>98</sup> [Page 33 of Permit To Operate, Condition 115](#)

<sup>99</sup> [Page 33 of Permit To Operate, Condition 116](#)

<sup>100</sup> [Page 34 of Permit To Operate, Condition 118](#)

monitoring records required shall be included in the semi-annual operational report (AQ- SC9).

**AQ-138** 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~~Calendar Day period. [NGUAQMDistrict Rule 102-~~§5.0(E); PSD~~2/09]<sup>101</sup>

**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-139** 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. [NGUAQMDistrict Rule 102(E)-~~§5.0~~]<sup>102</sup>

**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-140** The Permittee shall not operate reciprocating engine S-11, for the purpose of maintenance and testing, for more than 45 minutes in any Clock Hour~~60-minute~~ period. [NGUAQMDistrict Rule 102(E)-~~§5.0~~]<sup>103</sup>

**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-141** The Permittee shall report all occurrences of breakdowns of the equipment listed in Table 1-~~0~~ Authorized Emission Devices or Table ~~24.1~~4 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 NGUAQMDistrict in accordance with the timing requirements of NGUAQMDistrict Rule 105 (E)~~§5.0~~.<sup>104</sup>

**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-142** ~~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~~

<sup>101</sup> [Page 34 of Permit To Operate, Condition 117](#)

<sup>102</sup> [Page 34 of Permit To Operate, Condition 119](#)

<sup>103</sup> [Page 34 of Permit To Operate, Condition 120](#)

<sup>104</sup> [Page 35 of Permit To Operate, Condition 123](#)

~~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. [~~NCUAQMDistrict Rule 105 (E)2-§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-143** The ~~P~~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, and
- G. Actions taken to prevent reoccurrence of excess emission event.<sup>105</sup>

**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-144** The ~~P~~permittee shall provide to the ~~NCUAQMDistrict~~, a completed "Compliance Certification" form signed by the ~~F~~facility's ~~R~~responsible ~~O~~official which certifies the compliance status of the facility twice per calendar year. The compliance certification form (VK Series) must be submitted to the ~~NCUAQMDistrict~~ according to the following schedule: The semiannual certification (covering quarters 1 and 2) must be submitted prior to July 31<sup>st</sup> of the reporting year; and the annual certification (covering quarters 1, 2, 3, and 4) prior to March 1<sup>st</sup> of the following calendar year. The content of the ~~A~~annual ~~C~~certification shall include copies of the records designated in Table 197-0 to be kept "~~A~~annually".<sup>106</sup>

**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-145** The permittee shall maintain a log of usage for the Emergency IC Diesel

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<sup>105</sup> [Page 35 of Permit To Operate, Condition 125](#)

<sup>106</sup> [Page 35 of Permit To Operate, Condition 126](#)

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 log of usage shall list and document the nature of use for each operational event category listed below by recording the beginning and ending hour meter readings and time of day of 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-146** The Permittee shall continuously maintain onsite for the most recent five year period and shall be made available to the NCUAQM District APCO upon request, the records as listed in Table 207.0 below.<sup>107</sup>

**Table 207.0**

## Required Records for Engines S-1 through S-10

Frequency	Information to be Recorded
Upon Occurrence	<ul style="list-style-type: none"> <li>A. Records of maintenance conducted on engines (40 C.F.R. 60 Subpart IIII)</li> <li>B. Time, duration, and fuel firing mode for each engine startup</li> <li>C. Time, duration, and fuel firing mode for each engine shutdown</li> </ul>
	<ul style="list-style-type: none"> <li>D. Time, duration, and reason for each period of operation in diesel mode</li> <li>E. For each bulk delivery of diesel fuel received, certification from the supplier that the diesel fuel meets or exceeds CARB diesel specifications</li> <li>F. For each bulk delivery of diesel fuel received, the higher heating value (HHV) and sulfur content of the fuel</li> <li>G. Fuel Mode – each operating minute shall be designated as either “natural gas” or “diesel mode”</li> </ul>
At least one electronic reading every 15 minutes	<ul style="list-style-type: none"> <li>A. NO<sub>x</sub> (ppmvd @15% O<sub>2</sub>)</li> <li>B. CO (ppmvd @15% O<sub>2</sub>)</li> <li>C. O<sub>2</sub> (%)</li> <li>D. Exhaust gas temperature as SCR inlet (°F)</li> <li>E. Exhaust gas temperature at OC inlet (°F)</li> <li>F. Engine load (%)</li> </ul>
Hourly (for each engine)	<ul style="list-style-type: none"> <li>A. NO<sub>x</sub> (ppmvd @15% O<sub>2</sub>) and lb/hr, on a 1 hour average</li> <li>B. CO (ppmvd @15% O<sub>2</sub>) and lb/hr, on a rolling 3 hour average</li> <li>C. ROC (ppmvd @15% O<sub>2</sub>) and lb/hr, on a rolling 3 hour average</li> <li>D. NH<sub>3</sub> (ppmvd @15% O<sub>2</sub>) and lb/hr, on a rolling 3 hour average</li> <li>E. SO<sub>x</sub> (ppmvd @15% O<sub>2</sub>) and lb/hr, on a rolling 3 hour average</li> <li>F. Natural gas fuel consumption (MMBtu HHV, hourly average)</li> <li>G. Diesel fuel consumption during diesel mode (MMBtu HHV, hourly average)</li> <li>H. <u>Percentage of total heat input derived from diesel during Natural Gas Mode (MMBtu HHV, hourly average) Volumetric proportion of natural gas to diesel pilot injection when operating in natural gas mode</u></li> <li>I. Diesel fuel consumption during Diesel Mode (MMBtu HHV, hourly average)</li> </ul>

Daily	<ul style="list-style-type: none"> <li>A. NOx (lbs/day, total for all engines)</li> <li>B. CO (lbs/day, total for all engines)</li> <li>C. ROC (lbs/day, total for all engines)</li> <li>D. SOx (lbs/day, total for all engines)</li> <li>E. PM (lbs/day, total for all engines)</li> <li>F. Diesel particulate matter (lbs/day, total for all engines)</li> <li>G. Natural gas fuel consumption (MMBtu HHV, and cubic feet for each engine and total for all engines)</li> <li>H. Diesel pilot fuel consumption (MMBtu HHV, all engines combined)</li> <li>I. Diesel fuel consumption during diesel mode (MMBtu HHV, and gallons for each engine and total for all engines)</li> <li>J. Engine load (% load on a 24 hour average for each engine and total for all engines)</li> <li>K. Hours of operation (each engine and total for all engines as a sum of operating minutes)</li> </ul>
Monthly	<ul style="list-style-type: none"> <li>A. Sulfur content of natural gas (gr/100scf, monthly fuel testing)</li> <li>B. Natural gas sulfur content (gr/100scf, 12 month rolling average)</li> </ul>
Quarterly (combined total for all engines)	<ul style="list-style-type: none"> <li>A. NOx (tons)</li> <li>B. CO (tons)</li> <li>C. SOx (tons)</li> <li>D. ROC(tons)</li> <li>E. PM (tons)</li> <li>F. Diesel particulate matter (tons)</li> <li>G. Natural gas fuel consumption (MMBtu HHV, and cubic feet)</li> <li>H. Diesel pilot fuel consumption (MMBtu HHV, and gallons)</li> <li>I. Diesel fuel consumption during diesel mode (MMBtu HHV, and gallons)</li> <li>J. Sulfur content of natural gas (gr/100scf, 12 month rolling average)</li> <li>K. Hours of operation (for each fuel mode)</li> </ul>

Annually (combined total for all engines)	<ul style="list-style-type: none"> <li>A. NOx (tons)</li> <li>B. CO (tons)</li> <li>C. SOx (tons)</li> <li>D. ROC(tons)</li> <li>E. PM (tons)</li> <li>F. Diesel particulate matter (tons)</li> <li>G. Natural gas fuel consumption (MMBtu HHV)</li> <li>H. Diesel pilot fuel consumption (MMBtu HHV)</li> <li>I. Diesel fuel consumption during diesel mode (MMBtu HHV, and gallons)</li> <li>J. Sulfur content of natural gas (gr/100scf, annual average)</li> <li>K. Hours of operation (for each fuel mode)</li> </ul>
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**Verification:** The project owner shall make the site available for inspection by representatives of the district, ARB, and Commission upon request.

**AQ-147** 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 NCUAQMDistrict 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.<sup>108</sup>

**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-148** The Permittee shall provide notification and record keeping as required pursuant to 40 C.F.R., Part 60, Subpart A, 60.7.<sup>109</sup>

**Verification:** No verification needed.

<sup>108</sup> [Page 38 of Permit To Operate, Condition 129](#)

<sup>109</sup> [Page 38 of Permit To Operate, Condition 130](#)

**AQ-149** 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 and California Office of Health Hazard Assessment guidance documents~~reference document~~ Emission Inventory Criteria Guidelines. The inventory report shall be submitted to the NCUAQMD~~district~~ APCO no later than March 1<sup>st</sup> of the following calendar year. The inventory report is subject to NCUAQMD~~district~~ APCO approval. [NCUAQMD~~district~~ Rule 102 §5.0(E)]<sup>110</sup>

**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-150** The permittee shall submit 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-151** No later than 120 days health risk assessment protocol required pursuant to this section has been approved by the APCO, the permittee shall submit to the APCO a health risk assessment prepared pursuant to the approved protocol. [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.~~

**AQ-152** 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~~district~~ Rule 102 (E); PSD 2/09 §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.<sup>111</sup>

**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-153** 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

<sup>110</sup> [Page 38 of Permit To Operate, Condition 131](#)

<sup>111</sup> [Page 38 of Permit To Operate, Condition 132](#)

following [NCUAQMDistrict](#) Rule 102-(E); PSD 2/09§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 [D](#)iesel fuel consumed during the diesel mode operation.<sup>112</sup>

**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-154~~ 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-155~~ 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-146) shall be included in the semi-annual operational report (AQ-SC9).

**AQ-156** Not less than thirty days prior to the date of any source test required by this [P](#)ermit, the [P](#)ermittee shall provide the [NCUAQMDistrict](#) APCO with written notice of the planned date of the test and a copy of the source test protocol.<sup>113</sup>

**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-157** Source test results shall be summarized in a written report and submitted to the [NCUAQMDistrict](#) APCO directly from the independent source testing firm on the same day, the same time, and in the same manner as submitted to [P](#)ermittee. Source Test results shall be submitted to the [NCUAQMDistrict](#) APCO no later than 60 days after the testing is completed.<sup>114</sup>

**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-158** The [P](#)ermittee shall demonstrate compliance with [the Natural Gas Mode all-](#)

<sup>112</sup> [Page 38 of Permit To Operate, Condition 133](#)

<sup>113</sup> [Page 39 of Permit To Operate, Condition 136](#)

<sup>114</sup> [Page 39 of Permit To Operate, Condition 137](#)

~~the emission limits via source testing conducted in accordance with the Test Methods listed below. For purposes of compliance with this condition, testing shall be conducted while the engines are operated in Natural Gas Mode, and shall be conducted at the intervals and at the operating loads specified in Condition #139, identified in this permit 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.B.~~ \_\_\_ Visible emissions.

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

~~D.C.~~ \_\_\_ Ammonia – Bay Area Air Quality Management District Source Test Procedure ST-1B.

~~E.D.~~ \_\_\_ Reactive organic gases – CARB Method 100.

~~F.E.~~ \_\_\_ Nitrogen oxides – CARB Method 100.

~~G.F.~~ \_\_\_ Carbon monoxide – CARB Method 100 ~~& ASTM D6522-00 [NESHAP ZZZZ]~~.

~~H.G.~~ \_\_\_ Oxygen – CARB Method 100 ~~& ASTM D6522-00 [NESHAP ZZZZ]~~.

i. Oxygen shall be measured at the inlet and outlet of the oxidation catalyst.

ii. Oxygen measurements shall be made at the same time as the CO measurements.

~~I.H.~~ \_\_\_ Pressure drop measurements across the catalyst shall be made at the same time as the CO measurements.

~~J.I.~~ Natural gas fuel sulfur content – ASTM D3246.

~~K. Liquid fuel sulfur content – ASTM D5453-93.~~<sup>115</sup>

**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.

New Condition 139. To demonstrate compliance with the Natural Gas Mode emission limits, reciprocating engines S- 1 through S-10 shall be tested on a rotating basis where each engine is: 1) Tested each year; 2) Tested while operating at one of the designated operating loads; and 3) Tested at all three operating loads with a three year period. The designated operating loads, plus or minus 2.5%, shall be 52.5%, 75%, and 95%. 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. *[District Rule 102(E); PSD 2/09 amended 6/15]*<sup>116</sup>

**AQ-159** The Permittee shall demonstrate compliance with ~~all~~ the Diesel Mode emission limits via source testing conducted in accordance with the Test Methods listed below. For purposes of compliance with this condition, testing shall be conducted while the engines are operated in Diesel Mode, and shall be conducted at the intervals and at the operating loads specified in Condition #141, 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, ~~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. [NCUAQMDistrict Rule 102 (E); PSD 2/09 amended 6/15§5-0]

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

A.B. Diesel Particulate Matter-CARB Method 5 (front half only)

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

~~C.D.~~ Ammonia – Bay Area Air Quality Management District Source Test Procedure ST-1B.

~~D.E.~~ Reactive organic gases – CARB Method 100.

~~E.F.~~ Nitrogen oxides – CARB Method 100.

G. Carbon monoxide – CARB Method 100.

F.H. Co shall be measured at the inlet and outlet of the oxidation catalyst.

G.I. 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.~~

H. ~~Liquid Fuel Sulfur~~~~Natural gas fuel sulfur c~~Content – ASTM D~~5453-93324~~<sup>117</sup>

**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.

New Condition 141. To demonstrate compliance with the Diesel Mode emission limits, reciprocating engines S-1 through S-10 shall be tested on a rotating basis pursuant to Condition #140 where each engine is: 1) Tested while operating in Diesel Mode once every five years or following each 200 hours of operation of an individual engine in Diesel Mode whichever is sooner; 2) Tested while operating at one of the designated operating loads; and 3) Tested at all three designated operating loads with a 15 year period. The designated operating loads, plus or minus 2.5%, shall be 52.5%, 75%, and 95%. In addition, within 30 days of returning an engine to service after the completion of repair or maintenance activities, the Permittee shall conduct RATA testing on the affected engine's CEMs components. RATA testing shall be conducted in accordance with the applicable requirements of 40 CFR 60, Appendix B. The specific repair and maintenance activities triggering the RATA testing requirement shall be identified in the Facility's Device Maintenance & Replacement Plan. 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. [District Rule 102(E); PSD 2/09 amended 6/15]<sup>118</sup>

**AQ-160** ~~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]~~

<sup>117</sup> [Page 140 of Permit To Operate, Condition 140](#)

<sup>118</sup> [Page 140 of Permit To Operate, Condition 141](#)

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-159.~~

~~**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 (NH<sub>3</sub>) 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 NO<sub>x</sub> 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, NO<sub>x</sub> concentration upstream and downstream of the SCR catalyst, and the corresponding NH<sub>3</sub> 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-162** 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 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-163** — 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-162**.~~

**AQ-164** 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; [NCUAQMDistrict Rule 102 §5.0\(E\); Psd 2/09](#)]<sup>119</sup>

**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-165** The permittee shall demonstrate compliance with the hourly, daily, and annual SOx emission limits [for reciprocating engines S-1 through S-10](#) 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. [[NCUAQMDistrict Rule 102 §5.0\(E\)](#)];

[,PSD 2/09-PSD\]](#)<sup>120</sup>

**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-166** 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. [[NCUAQMDistrict](#) Rule 102 [§5-0\(E\); PSD 2/09, PSD\]](#)<sup>121</sup>

**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-167** 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 [NCUAQMDistrict](#) 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 [NCUAQMDistrict](#) within 60 days after the testing was performed. [[District Rule 102 \(E\); PSD 2/09\]](#)<sup>122</sup>

**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**

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### **FUEL USAGE**

- AQ-168** 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 [CCRCal. Code Regs., 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 al- Code Regs., tit. 13 Sections 2700-2710](#)), or

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<sup>120</sup> [Page 40 of Permit To Operate, Condition 143](#)

<sup>121</sup> [Page 41 of Permit To Operate, Condition 144](#)

<sup>122</sup> [Page 41 of Permit To Operate, Condition 145](#)

D. Any combination of a) through d) above.<sup>123</sup>

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

### EMISSIONS

~~AQ-169~~ 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-162~~.

### OPERATIONAL CONDITIONS

~~AQ-170~~ 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-171** The Emergency IC Diesel Generators S-11 and S-12 are authorized the following maximum allowable annual hours of operation as listed in Table 198.0 below [Cal. Code Regs., tit. 17 CCR §93115]:<sup>124</sup>

**Table 198.0**  
**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-172** The Ppermittee 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

<sup>123</sup> [Page 34 of Permit To Operate, Condition 121](#)

<sup>124</sup> [Page 34 of Permit To Operate, Condition 122](#)

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 (E)§5.0]<sup>125</sup>

**Verification:** The project owner shall certify providing the district full funding for the ambient air quality monitoring station. A copy of 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-173** 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 (E)§5.0]<sup>126</sup>

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

[New Condition 149. The following equipment units and emissions are considered to be insignificant, and as such, are not required to obtain operating permits. However, these units and emission sources are required to comply with all applicable Federal and Local Enforceable Only general requirements and will be included in the facility's emission inventory. \[District Rule 102 §4.13\]<sup>127</sup>](#)

#### [Table 21 - Insignificant Sources](#)

<sup>125</sup> [Page 41 of Permit To Operate, Condition 147](#)

<sup>126</sup> [Page 41 of Permit To Operate, Condition 148](#)

<sup>127</sup> [Page 42 of Permit To Operate, Condition 149](#)

<u><a href="#">Exempt Equipment / Emissions</a></u>
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<u><a href="#">Air Conditioning Units</a></u>
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<u><a href="#">Combustion Emissions from the Propulsion of Mobile Sources</a></u>
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<u><a href="#">Equipment Operated in Accordance with a Valid California Portable Equipment Registration (PERP)</a></u>
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<u><a href="#">Diesel Fire Pump Fuel Tank(s)</a></u>
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<u><a href="#">Diesel Fuel Dispensing Equipment</a></u>
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<u><a href="#">Distilled Oil Storage Tank(s)</a></u>
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<u><a href="#">Gasoline Dispensing Equipment (non-retail)</a></u>
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<u><a href="#">Lube Oil Tank(s)</a></u>
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<u><a href="#">Oil/Water Separator(s)</a></u>
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<u><a href="#">Portable Sandblasting Unit(s)</a></u>
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