August 11, 2021

Docket No. 08-AFC-04C

Mr. Joseph Douglas
Compliance Project Manager
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

Subject: **Petition to Amend Air Quality Conditions of Certification (08-AFC-04C)**
Orange Grove Energy Center, Pala, CA

Dear Mr. Douglas:

With this Petition to Amend, Orange Grove Energy, L.P. (OGE), requests modifications to the Final Commission Decision on the Orange Grove Power Plant (Final Decision), as amended, to: (1) allow for short-term like-kind replacement of turbines when turbine maintenance offsite is needed; and (2) make the California Energy Commission's (CEC's) Conditions of Certification for air quality consistent with new Permits to Operate issued by the San Diego County Air Pollution Control District (APCD) that allow for such short-term like-kind turbine replacement.

1.0 Background

The Orange Grove Power Plant, a.k.a. Orange Grove Energy Center (OGEC), is a natural gas-fired peaker power plant located on Assessors Parcel No. 110-072-26 in unincorporated San Diego County near Pala, California. The OGEC is owned by OGE and has been operating since June 2010. It includes two (2) General Electric (GE) LM6000 PC SPRINT simple-cycle combustion turbine-generators (Units 1 and 2), each with a nominal output of 49.8 megawatts (MW). Both Units are equipped with water injection and selective catalytic reduction to control emissions of nitrogen oxides, and oxidation catalyst to control emissions of carbon monoxide and volatile organic compounds, and a continuous emissions monitoring system to measure and record pollutant emissions. The Units, including emission control, monitoring, and recording systems, are subject to permits issued by APCD.

Portions of the CEC's current Conditions of Certification were adopted to mimic the APCD's Permits to Operate APCD2011-PTO-000889 and APCD2011-PTO-000890 for Units 1 and 2, respectively, as those conditions were written in the Final Decision last amended by CEC Order on July 23, 2016. OGE has been corresponding with APCD to obtain revisions to Permits to Operate APCD2011-PTO-000889 and APCD2011-PTO-000890 to allow for short-term like-kind replacement of turbines when turbine maintenance offsite is needed, and in July 2021 APCD issued revised Permits to Operate APCD2011-PTO-000889 and APCD2011-PTO-000890 incorporating new conditions for this allowance. OGE is petitioning CEC to update the OGEC Conditions of Certification for air quality to be consistent with the revised Permits to Operate, and to plan for the inevitable eventual need for short-term replacement of turbines for offsite repairs thereby improving reliability of the OGEC and the grid. OGEC performs an essential public service and is vital to the reliability of the San Diego regional electrical grid. It can reach full power in approximately 10 minutes, which allows it to be dispatched quickly when needed for grid

3.0 Necessity for the Proposed Change and Why it Should be Permitted

OGEC has been operating since 2010. It is a near certainty that the OGEC turbines will need to be shipped offsite in the foreseeable future. The proposed change is needed for consistency with the revised APCD Permits to Operate for the OGEC Units and to avoid delay in installing and operating a like-kind replacement when there is a need for a turbine to be shipped offsite. Power generation is OGE's core business and any extended period of being unable to operate a unit can result in substantial economic impact. Additionally, OGEC provides an essential public service and is an important cornerstone of San Diego's regional electric grid stability with its quick start and black-start capabilities. The proposed change is necessary to help ensure that OGEC is available when needed to support the regional grid.

The propose change should be permitted because it will not result in any new or increased environmental impact, will not conflict with any law, ordinance, regulation or standard (LORS), and will benefit the public by helping to ensure OGEC can reliably continue to meet contractual obligations to supply the California electric grid.

4.0 New Information

There is no relevant new information since the Final Decision other than the petitioner's realization of the eventuality of an extended major turbine maintenance event. Short-term like-kind replacement of a turbine during maintenance was not addressed in the Application for Certification but will not result in any new or increased impacts compared to those addressed in the CEC Final Decision record.

5.0 Analysis of Effects on the Environment

The proposed change will not result in any new or increased adverse effect to the environment. The turbine replacement would be like-kind and the same emission control systems would be operated without change and with the same emission limits. Compliance with the emission limits will be confirmed by continuous emissions monitoring in accordance with existing Conditions of Certification and Permits to Operate.

6.0 Compliance with Laws, Ordinances, Regulations and Standards

The proposed change will not have any impact on compliance with LORS. The same standards will apply to the like-kind equipment and there will be no change in ability to comply. The additional Conditions of Certification this Petition is requesting include emissions limits of 100 pounds per calendar day for the replacement turbine ensuring that the short-term like-kind replacement does not trigger the need for a new permit under APCD's Rule 10.

7.0 Effects to the Public

The proposed change will not have any adverse effect on the public. The proposed change would have a beneficial effect of increased regional electric grid reliability as previously described in Section1.0 and 3.0 of this Petition.

8.0 Parcels and Owners Within 1,000 Feet

Exhibit C provides a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 1,000 feet of the parcel that OGEC is located on.

9.0 Potential Effects on Nearby Owners, Residents, and the Public

The proposed change will not have any impact on nearby owners, residents, or the public. The short-term like-kind replacement will be identical equipment operated with identical environmental controls. There will be no increase in emissions of pollutants or noise or any other discernable difference in OGEC operations. There would be no expansion or increase in existing use.

10.0 California Environmental Quality Act

The short-term like-kind turbine replacement would not result in any new or increased impact to the public or the environment, would not conflict with any LORS, and would be part of a necessary periodic maintenance event. There would be no discernable change to the OGEC physical presence or operation. The Conditions of Certification changes requested in this Petition as identified in Exhibit B are minor inconsequential changes requested only for consistency with APCD's revisions to the Permits to Operate including planning for the inevitable need for short-term turbine replacement. The two Conditions of Certification requested for deletion (AQ-59 and -60) were removed by APCD from the Permits to Operate because they are obsolete conditions that were related to a one-time maintenance of the SCR systems that was completed several years ago and Verification fully satisfied. Considering these factors, the requested changes are ministerial Insignificant Project Changes and not subject to California Environmental Quality Act review.

11.0 Request for Expedited Processing

Considering the absence of any new or increased adverse impacts, uninterrupted compliance with LORS, and the importance of OGEC reliability to regional electric grid resiliency, OGE requests that processing of this petition be expedited in the common interest of OGE and the public.

Please contact me at 760-936-1617 or rgarcia@orangegroveenergy.com if you require further information or have any questions. We look forward to working with CEC staff to expedite the requested changes.

Sincerely,

Ramiro Garcia
Compliance Manager, OGE

Attachments
Exhibit A – OGE Application to APCD, Revised Permits to Operate
Exhibit B – Requested Changes to CEC Conditions of Certification
Exhibit C - Parcels and Landowner Information Within 1,000 feet.

cc: John Hutson, OGE
William Taylor, JPOWER
OGE File: 300.6.2

EXHIBIT A

OGE Application to APCD and Revised Permits to Operate

May 26, 2021

Mr. John Annicchiarico
Senior Engineer
San Diego Air Pollution Control District
10124 Old Grove Rd.
San Diego, California 92131-1649

Subject: **Request for Change in Permit Conditions for Units 1 and 2 – Orange Grove Energy, Pala, California; Permits APCD2011-PTO-000889 and APCD2011-PTO-000890**

Dear Mr. Annicchiarico:

Orange Grove Energy (OGE) is submitting this request as an application for Change of Permit Conditions for Turbine Generator Unit 1, permitted under APCD2011-PTO-000889, and for Turbine Generator Unit 2, permitted under APCD2011-PTO-000890.

The existing engine components in Unit 1 and Unit 2 must undergo routine maintenance and repair at an off-site location. This maintenance and repair is commonly required for turbine installations. Without the proper and required maintenance and repair, the Unit 1 or 2 turbines could be damaged with continued operation. The engine components must be serviced off-site due to the nature of the repairs and the fact that OGE and Unit 1 and 2 are under a CAISO must-run contract.

OGE requests expedited changes to the two permits, PTO APCD2011-PTO-000889 and APCD2011-PTO-000890, to include the following condition in each permit:

In the event that the Unit 1 or Unit 2 gas turbine engine (OGE Unit) is removed from service for required repair, the permit holder may install an identical gas turbine engine (General Electric, Model LM-6000, 49.8 MW nominal output) as a temporary replacement. The temporary turbine will be operated while the OGE Unit is repaired. Prior to operating the temporary gas turbine engine, the applicant shall notify the District, in writing, when the installation has been completed. Operation of the temporary turbine shall end on the day when the OGE Unit has been re-installed. Prior to operating the OGE Unit, the applicant shall notify the District, in writing, that re-installation has been completed. Actual emissions of oxides of nitrogen (NOx), carbon monoxide (CO), or other criteria pollutants listed in Rule 11(a)(4), for the temporary turbine shall not exceed 100 pounds per day as determined by the Continuous Emissions Monitoring System (CEMs), or other District-approved calculation methods. [Rule 11(d)(5) Exemption]

The SDAPCD General Application Form is attached with this letter. The appropriate fee will be remitted upon your confirmation of the appropriate fee estimate.

Should you have any questions or need additional information to process this request for a Change of Permit Conditions, please contact me at (760) 936-1617 or via e-mail at rgarcia@orangegroveenergy.com.

Sincerely,

Ramiro Garcia
Compliance Manager, OGE

cc: John Hutson, OGE
William Taylor, JPOWER
James Westbrook, BlueScape Environmental
OGEFile: 300.1.1.1.4

Internal Use Only
APP ID: APCD20 -APP-
SITE ID: APCD20 -SITE-

GENERAL PERMIT OR REGISTRATION APPLICATION FORM

APCD AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

Submittal of this application does not grant permission to construct or to operate equipment except as specified in Rule 24(c) or (d)

REASON FOR SUBMITTAL OF APPLICATION:

- ☐ New Installation
- ☐ Existing Unpermitted Equipment or Rule 11 Change
- ☐ Modification of Existing Permitted Equipment
- ☐ Amendment to Existing Authority to Construct or Application
- ☐ Change of Equipment Location
- ☐ Change of Equipment Ownership ***(please provide proof of ownership)***
- ☑ Change of Permit Conditions
- ☐ Change Permit to Operate Status to Inactive
- ☐ Banking Emissions
- ☐ Registration of Portable Equipment
- ☐ Other (Specify) _____

List affected APP/PTO Record ID(s): APCD2011-PTO-00889 APCD2011-PTO-00890 _____ _____

APPLICANT INFORMATION

Name of Business (DBA): Orange Grove Energy, L.P.

Does this organization own or operate any other APCD permitted equipment at this or any other adjacent locations? ☑ Yes ☐ No

If yes, list assigned Site Record IDs listed on your Permits: APCD2011-PTO-000891, APCD2011-PTO-000892

Name of Legal Owner (if different from DBA): _____

Equipment Owner		**Authority to Construct Mailing Address**	
Name: Orange Grove Energy, L.P.		Name: Orange Grove Energy, L.P.	
Mailing Address: 35435 East Pala del Norte Road		Mailing Address: 35435 East Pala del Norte Road	
City: Pala	State: CA	City: Pala	State: CA
Zip: 92059	Phone: (760)615-2010	Zip: 92059	Phone: (760)615-2010
E-Mail Address: rgarcia@orangegroveenergy.com		E-Mail Address: rgarcia@orangegroveenergy.com	

Permit To Operate Mailing Address		**Invoice Mailing Address**	
Name: Orange Grove Energy, L.P.		Name: Orange Grove Energy, L.P.	
Mailing Address: 34535 East Pala del Norte Road		Mailing Address: 34535 East Pala del Norte Road	
City: Pala	State: CA	City: Pala	State: CA
Zip: 92059	Phone: (760)615-2010	Zip: 92059	Phone: (760)615-2010
E-Mail Address: rgarcia@orangegroveenergy.com		E-Mail Address: rgarcia@orangegroveenergy.com	

EQUIPMENT/PROCESS INFORMATION: Type of Equipment: ☑ Stationary ☐ Portable *If portable, please enter below the equipment storage address*. If portable, will operation exceed 12 consecutive months at the same location ☐ Yes ☐ No

Equipment Location Address: 35435 East Pala del Norte Road City: Pala State: CA

Parcel No.: 110-072-26 Zip: 92059 Phone: (760)615-2010 E-mail: rgarcia@orangegroveenergy.com

Site Contact: Ramiro Garcia, Compliance Manager Phone: (760) 615-2026

General Description of Equipment/Process: Electric Power Generation

Application Submitted by: ☑ Owner ☐ Operator ☐ Contractor ☑ Consultant Affiliation BlueScape Environmental

EXPEDITED APPLICATION PROCESSING: ☑ I hereby request Expedited Application Processing and understand that:

a) Expedited processing will incur additional fees and permits will not be issued until the additional fees are paid in full (see Rule 40(d)(8)(iv) for details) b) Expedited processing is contingent on the availability of qualified staff c) Once engineering review has begun this request cannot be cancelled d) Expedited processing does not guarantee action by any specific date nor does it guarantee permit approval.

I hereby certify that all information provided on this application is true and correct.

SIGNATURE: _____ Date: 5/27/2021

Print Name: Paul Peterson Phone: (847)908-2811

Company: J-POWER USA Development Co., Ltd. E-mail Address: ppeterson@jpowerusa.com

Internal Use Only

Date: _____ Staff Initials: _____ Amt Rec'd: $ _____ Fee Schedule: _____

RNP: _____ EMF: _____ NBF: _____ TA: _____ *GEN_APP_Form_Rev Date: Feb. 2015*

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

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006780

PERMIT RECORD ID
APCD2011-PTO-000889

Orange Grove Energy LP
Ramiro Garca
35435 East Pala Del Norte Rd
Pala CA 92059

EQUIPMENT ADDRESS
Orange Grove Energy LP
Ramiro Garcia
35435 East Pala Del Norte Rd
Pala CA 92059

PERMIT TO OPERATE
EXPIRES: October 31, 2021

This permit is not valid until required fees have been paid.

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

EQUIPMENT OWNER

J-Power USA Development Co. LTD Paul Peterson 35435 East Pala Del Norte Rd, Pala, CA 92059

EQUIPMENT DESCRIPTION

One natural gas simple cycle combustion turbine generator (Unit 1): General Electric, Model LM6000 PC SPRINT, nominal output 49.8 MW, S/N 191-617, with water injection, a selective catalytic reduction (SCR) unit with ammonia injection control system, an oxidation catalyst, data acquisition system (DAHS) and continuous emission monitoring system (CEMS).

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

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

BEC: APCD2021-CON-001846

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

1. In the event that the gas turbine engine with S/N 191-617 is removed from service for required repair, the permit holder may install an identical gas turbine (General Electric, Model LM-6000, 49.8 MW capacity) as a temporary replacement. The temporary gas turbine may be operated for a time period not to exceed 120 calendar days for each time the gas turbine with S/N 191-617 is repaired. This time period shall begin on the day that construction has been completed on the installation of the temporary replacement gas turbine. At least twenty-four (24) hours prior to operating the temporary replacement gas turbine, the permit holder shall notify the District, in writing that this construction has been completed. The time period shall end on the day that construction has been completed on the re-installation of the gas turbine with S/N 191-617 after it has been repaired. At least twenty-four (24) hours prior to operating the repaired gas turbine with S/N 191-617, the applicant shall notify the District, in writing, that this construction has been completed. The total duration of the time period shall be calculated from the date construction of the replacement gas turbine has been completed until the date reinstallation of the repaired gas turbine with S/N 191-617 has been completed, regardless of whether the temporary gas turbine operates on any individual day. The cumulative, total duration of operation of the temporary gas turbine under this condition shall not exceed 120 days in any consecutive 12-month period.

2. At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of oxides of nitrogen (NOx) and carbon monoxide (CO), shall each not exceed 100 pounds per calendar day as determined by the NOx and CO Continuous Emissions Monitoring System (CEMS).
3. At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of volatile organic compounds shall not exceed 100 pounds per calendar day, as determined by the CO Continuous Emissions Monitoring System (CEMS) and the CO/VOC surrogate relationship.
4. At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of sulfur oxides (Sox) and particulate matter (PM10) shall each not exceed 100 pounds per calendar day, as determined by a source test or emissions calculations using emission factors or mass balance.
5. In the event that a source test or RATA is required to be conducted at the time a temporary engine is installed, the owner or operator shall be required to conduct any required tests using the temporary gas turbine and must conduct the same tests within 60 days of completing reinstallation of the repaired gas turbine with S/N 191-617.
6. The Emission unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The permittee shall maintain quarterly records of sulfur content (grains/100 dscf) and higher heating value (Btu/dscf) of the natural gas and provide such records to the District personnel upon request. [Rule 62 and/or 40 CFR 60 Subpart KKKK)
7. This equipment shall be properly maintained and kept in good operating condition at all times. (NSR)
8. The permittee shall operate the project in accordance with all data and specifications submitted with the application. (Rule 10)
9. For the purposes of this Permit to Operate, startup conditions shall be defined as the period of time that begins when fuel flows to the turbine and shall continue for no longer than 30 consecutive minutes. Shutdown conditions shall be defined as the 15 minute period preceeding the moment at which fuel flow ceases. The Data Acquisition and Handling System (DAHS), as required by 40 CFR75, shall record these events. This condition may be modified by the District based on field performance of the equipment. (NSR)
10. The permittee shall obtain any necessary District permits for all ancillary combustion equipment including emergency engines, prior to on-site delivery of the equipment. (Rule 10)
11. The exhaust stacks for the combustion turbines shall be at least 80 feet in height above site base elevation. (NSR)
12. The unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The permittee shall maintain quarterly records of sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas and provide such records to the District personnel upon request. (Rule 62 and/or 40 CFR 60 Subpart KKKK)
13. The permittee shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances. (40 CFR Part 73)
14. The total combined operating hours for the combustion turbines of Permit No. APCD2011-PTO-000889 and APCD2011-PTO-000890 shall not exceed 6,400 hours per calendar year. (NSR)
15. The permittee shall comply with the applicable requirements in 40 CFR Parts 60, 72, 73, and 75. (Rules 1412 and 1421)
16. For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periods shall be as specified herein. (Rule 69.3.1; Rule 21)
17. For the purposes of this Permit to Operate, startup conditions shall be defined as the period of time that begins when fuel flows to the turbine and shall continue for no longer than 30 consecutive minutes. Shutdown conditions shall be defined as the 15 minute period preceeding the moment at which fuel flow ceases. The Data Acquisition and Recording System (DAS), as required by 40 CFR75, shall record these events. This condition may be modified by the District based on field performance of the equipment. (NSR)
18. For each emission limit expressed as pounds per hour or parts per million based on a clock-hour averaging period, compliance shall be based on continuous emission data collected at least once every 15 minutes. (40 CFR Part 75; Rule 21)

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006780

PERMIT RECORD ID
APCD2011-PTO-000889

19. During startup conditions, the emissions from each unit exhaust stack shall not exceed the following emission limits as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing. Compliance with each limit shall be based on the startup period.
Pollutant Limit, lbs/event
Oxides of Nitrogen (NOx), calculated as NO2 13.25
Carbon Monoxide (CO) 12.05
Volatile Organic Compounds (VOC) 1.95
(NSR)

20. Emissions of nitrogen oxides from each unit exhaust stack shall not exceed 25 parts per million by volume, dry basis (ppmvd) at 15 percent O2 or 150 ng/J of useful output (1.2 lb/MWh) (4 hour average pursuant to 40 CFR § 60.4380(b)). This limit applies at all times including periods of startup and shutdown. [40 CFR 60 Subpart KKKK, Appendix Table 1]

21. Excess emissions shall be as defined in 40 CFR Subpart KKKK § 60.4380. An excess emission is any unit operating period, including periods of startup and shutdown, in which the 4-hour or 30-day rolling average NOx emission rate exceeds the applicable emission limit in 40 CFR 60 Subpart KKKK, Appendix Table 1.

22. For each affected unit required to continuously monitor parameters or emissions the permittee must submit to the District reports of excess emissions and monitor downtime, in accordance with 40 CFR 60 Subpart KKKK 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. Reports submitted pursuant to this requirement shall be postmarked no later than the 30th day following the end of the 6-month reporting period. 6-month reporting periods comprise January 1 through June 30, and July 1 through December 31. [40 CFR Subpart KKKK 60.4375(a)]

23. During shutdown conditions, the emissions from each unit exhaust stack shall not exceed the following emission limits as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing. Compliance with each limit shall be based on the shutdown period
Pollutant Limit, lbs/event
Oxides of Nitrogen (NOx), calculated as NO2 2.68
Carbon Monoxide (CO) 4.43
Volatile Organic Compounds (VOC) 0.73
(NSR)

24. The emissions concentration of oxides of nitrogen (NOx) from the unit exhaust stack, calculated as nitrogen dioxide (NO2), shall not exceed 2.5 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over a clock hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based on source testing calculated as the average of three subtests. This limit shall not apply during startup and shutdown conditions as defined herein. (NSR)

25. The emissions concentration of carbon monoxide (CO) from the unit exhaust stack shall not exceed 6.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over a clock-hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based upon source testing calculated as the average of three subtests. This limit shall not apply during startup and shutdown conditions as defined herein. (NSR)

26. The volatile organic compounds (VOC) emission concentration from the unit exhaust stack, calculated as methane, measured in the exhaust stack, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over each clock-hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based on source testing calculated as the average of three subtests. At the time of the initial compliance test, a District-approved CO/VOC surrogate relationship shall be established. The CO/VOC surrogate relationship shall be verified and/or modified, if necessary, based on annual source testing. This limit shall not apply during startup and shutdown conditions as defined herein. (NSR)

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006780

PERMIT RECORD ID
APCD2011-PTO-000889

27. The emissions from each unit exhaust stack shall not exceed the following emission limits, except during startup and shutdown conditions, as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a clock-hour averaging period.
    Pollutant Limit, lbs/hour
    Oxides of Nitrogen (NOx), calculated as NO2 4.3
    Carbon Monoxide (CO) 6.1
    Volatile Organic Compounds (VOC) 1.3
    (NSR)

28. The emissions from each unit exhaust stack shall not exceed the following emission limits, as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a calendar day averaging period.
    Pollutant Limit, lbs/day
    Oxides of Nitrogen (NOx), calculated as NO2 141.2
    Carbon Monoxide (CO) 182.2
    Volatile Organic Compounds (VOC) 36.5
    (NSR)

29. The discharge of total particulate matter from the unit exhaust stack of the combustion turbine shall not exceed 0.10 grains per dry standard cubic foot standardized to 12% CO2. The District may require periodic testing to verify compliance with this standard. (Rule 53)

30. The emissions from each unit exhaust stack shall not exceed the following emission limits, as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a rolling 12 calendar month averaging period, updating once each calendar month. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter.
    Pollutant Limit, tons/year
    Oxides of Nitrogen (NOx), calculated as NO2 8.6
    Carbon Monoxide (CO) 11.3
    Volatile Organic Compounds (VOC) 2.3
    (NSR)

31. Emissions of particulate matter 10 microns or less (PM10) from the unit exhaust stack shall not exceed 3.0 lbs per hour. Compliance with this limit shall be demonstrated based upon initial source testing calculated as the average of three subtests. The total PM and condensable PM measured using EPA Method 5 and 202 will be assumed to be PM10. (NSR; Rule 21)

32. Fuel flowmeters with an accuracy of +/- 2% shall be maintained to measure the volumetric flow rate corrected for temperature and pressure. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR part 75, Appendix D, and Section 2.1.6. (Rule 69.3.1)

33. Visible emissions, including emissions from the lube oil vents and the exhaust stack of the unit shall not exceed 20% opacity, excluding water vapor, for more than three (3) minutes in any period of 60 consecutive minutes. (Rule 50)

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006780

PERMIT RECORD ID
APCD2011-PTO-000889

34. Total aggregate emissions from all stationary emission units at this stationary source, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1), shall not exceed the following limits in each rolling 12-calendar month period. The total aggregate emissions shall include emissions during all times that the equipment is operating, including but not limited to, emissions during periods of commissioning, startup, shutdown and tuning. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter.
i. Oxides of Nitrogen (NOx): 49.5 tons/year
ii. Carbon Monoxide (CO): 99 tons/year
iii. Volatile Organic Compounds (VOC): 49.5 tons/year
iv. Oxides of Sulfur (SOx): 99 tons/year
v. Particulate Matter (PM10) 99 tons/year
(NSR)

35. The emissions of any single federal Hazardous Air Pollutant (HAP) shall not equal or exceed 9.9 tons, and the aggregate emissions of all federal HAPs shall not equal or exceed 24.75 tons in any rolling 12-calendar month period. Compliance with these single and aggregate HAP limits shall be based on a methodology approved by the District for the purpose of calculating HAP emissions for this permit. If emissions exceed these limits, the permittee shall apply to amend this permit to reflect applicable federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR Part 63. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter. (40 CFR Part 63)

36. Before operating an SCR system, continuous monitors shall be installed on each SCR system to monitor or calculate, and record the ammonia injection rate (lbs/hour) and the SCR catalyst temperature (°F). The monitors shall be installed, calibrated and maintained in accordance with a District approved protocol. This protocol, which shall include the calculation methodology, shall be submitted to the District for written approval at least 60 days prior to initial startup of the gas turbines with the SCR system. The monitors shall be in full operation at all times when the turbine is in operation. (NSR)

37. Except during startup and shutdown conditions, the water injection system, the SCR system and oxidation catalyst control system, including the ammonia injection system serving the turbine, shall be in full operation at all times when the turbine is in operation. (NSR)

38. All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request. (Rule 1421)

39. In the event of a breakdown in an automatic ammonia injection control system, the unit shall be shut down or a trained operator shall operate the ammonia injection control system manually and the breakdown shall be reported to the District Compliance Division pursuant to Rule 98(B)(1) and 98(E). (Rule 98)

40. The concentration of ammonia solution used in the ammonia injection system shall be less than 20% ammonia by weight. Records of ammonia deliveries and ammonia solution concentration shall be maintained on site and made available to District personnel upon request. (Rule 1200)

41. The permittee shall submit a source test protocol to the District for approval. The source test protocol shall comply with the following requirements:
a. Measurements of NOX, CO, and O2 emissions shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) methods 7E, 10, and 3A, respectively, and district Source Test, method 100, or alternative methods approved by the District;
b. Measurement of VOC emissions shall be conducted in accordance with EPA Methods 25A and/or 18, or alternative methods approved by the District;
c. Measurements of PM-10 emissions shall be conducted in accordance with EPA Methods 5 and 201A or 202, or alternative methods approved by the district;
d. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management District ST-1B or an alternative method approved by the District;
e. Source testing shall be performed at the normal load level, as specified in 40 CFR part 75 Appendix A Section 6.5.2.1.d, provided it is not less than 80% of the unit's rated load unless it is demonstrated to the satisfaction of the district that the unit cannot operate under these conditions . If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous level power level.
f. Measurements of opacity shall be conducted in accordance with EPA Method 9 or an alternative method approved by the District.
g. Measurement of fuel flow shall be conducted in accordance with an approved test protocol.
(Rule 69.3.1; Rule 21)

42. Each turbine shall be equipped with continuous monitors to measure or calculate, and record, the following operational characteristics of each unit:
i. Hours of operation (hours),
ii. Natural gas flow rate (scfh),
iii. Heat input rate (MMBtu /hr),
iv. Exhaust gas temperature (ºF),
v. Power output (gross MW).
vi. Water (for NOx control) injection rate (gal/hour) if equipped with water injection.
vii. SCR inlet temperature (°F)
viii. Ammonia injection rate (gal/hour)
(NSR; Rule 21)

43. A CEMS Protocol is a document approved in writing by the APCD M&TS Division that describes the quality assurance and quality control procedures for monitoring, calculating and recording stack emissions from the unit. (Rule 69.3.1; Rule 21)

44. The permittee shall submit a turbine operation monitoring protocol, which shall include relevant calculation methodologies to the District for written approval. The monitors shall be installed, calibrated, and maintained in accordance with the protocol. The monitors should be in full operation at all times when the turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request. The permittee shall make the site available for inspection of the turbine operation monitors and monitor maintenance records by representatives of the District, CARB, and the California Energy Commissions. (Rule 69.3.1; NSR; Rule 21)

45. The exhaust stacks for each turbine shall be equipped with source test ports and platforms to allow for the measurement and collection of stack gas samples consistent with all approved test protocols. The ports and platforms shall be constructed in accordance with District Method 3A, Figure 2, and approved by the District. (Rule 19)

46. If source testing will be performed by an independent contractor and witnessed by the District, a source test protocol shall be submitted to the District for written approval at least 30 days prior to source testing. (Rule 69.3.1)

47. Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the District for review and approval. (Rule 69.3.1)

48. This unit shall be source tested to demonstrate compliance with the NOx, CO, VOC, and Ammonia emission standards of this permit, using District approved methods. The source test and the NOx and CO RATA tests shall be conducted in accordance with the RATA frequency requirements of 40 CFR 75 Appendix B, Sections 2.3.1 and 2.3.3. (NSR, Rule 1200)

49. The permittee shall comply with the continuous emission monitoring requirements of 40 CFR Part 75. (40 CFR Part 75; Rule 21)

50. At least 60 days prior to the operation of the CEMs, the permittee shall submit a CEMs operating protocol to the District for written approval. The permittee shall make the site available for inspection of the CEMs and CEMs maintenance records by representatives of the District, CARB, and the California Energy Commission. (Rule 69.3.1)

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

52. A Relative Accuracy Test Audit (RATA) and other required certification tests shall be performed and completed on the CEMs in accordance with 40 CFR Part 75 Appendix A Specifications and Test Procedures. At least 30 days prior to the test date, the permittee shall submit a test protocol to the District for written approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present. Within 45 days of completion of this test, a written test report shall be submitted to the District for approval. (40 CFR Part 75)

53. The Oxides of Nitrogen (NOx) and Oxygen (O2) CEMs shall be certified and maintained in accordance with applicable Federal Regulations including the requirements of:

    a. -Sections 75.10 and 75.12 of Title 40 Code of Federal Regulations Part 75 (40 CFR 75).

    b. -The performance specifications of Appendix A of 40 CFR 75.

    c. -The quality assurance procedures of Appendix B of 40 CFR 75.

    d. -The CEMs protocol approved by the District.

    The Carbon Monoxide (CO) CEMS shall be certified and maintained in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit. (Rule 69.3.1)

54. Ammonia emissions from each unit exhaust stack shall not exceed 5 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen, averaged over a clock-hour period. This limit shall not apply during startup and shutdown conditions. Compliance with this limit shall be demonstrated through source testing calculated as the average of three subtests and utilizing one of the following procedures:
    a. Calculate ammonia emissions using the following equation:
    NH3 = ((a-(b * c/1,000,000)) * (1,000,000/b)) * d
    Where: a = ammonia injection rate (lbs/hour) / (17.0 lbs/lb-mole),
    b = exhaust flow rate at 15% oxygen / (29 lbs/lb-mole)
    c = change in measured NOx concentration (ppmvd @ 15% Oxygen) across the catalyst,
    d = ratio of measured ammonia slip to calculate ammonia slip as derived during compliance testing.
    b. Calculate ammonia emissions using the following equation:
    NH3 = (((a / b) * 1,000,000) - 1.2c) * d
    Where: a = ammonia injection rate (lbs/hour) / (0.04478 lbs NH3 / cft NH3),
    b = exhaust flow rate at 15% oxygen (scft/hour),
    c = change in measured NOx concentration (ppmvd @ 15% Oxygen) across the catalyst,
    d = ratio of measured ammonia slip to calculated ammonia slip as derived during compliance testing. (Rule 1200)

55. The CEMS shall be in operation in accordance with the District approved CEMs monitoring protocol at all times when the turbine is in operation. A copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request. (Rule 69.3.1)

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006780

PERMIT RECORD ID
APCD2011-PTO-000889

56. Continuous emission monitoring system (CEMS) shall be installed and properly maintained and calibrated to measure, calculate and record the following, in accordance with the District approved CEMS protocol:

    a. Percent oxygen (O2) in the exhaust gas (%);

    b. Average concentration of oxides of nitrogen (NOx) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen;

    c. Average concentration of carbon monoxide (CO) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen;

    d. Average concentration of volatile organic compound (VOC) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen, based on the CO/VOC surrogate relationship;

    e. Clock hour mass emissions of oxides of nitrogen (NOx), in lbs/hour;

    f. Clock hour mass emissions of carbon monoxide (CO), in lbs/hour;

    g. Clock hour mass emissions of volatile organic compound (VOC) in lbs/hour, based on the CO/VOC surrogate relationship;

    h. Calendar day mass emissions of oxides of nitrogen (NOx) in lbs/day;

    i. Calendar day mass emissions of carbon monoxide (CO) in lbs/day;

    j. Calendar day mass emissions of volatile organic compounds (VOC) in lbs/day;

    k. Rolling 12-calendar month mass emissions of oxides of nitrogen (NOx), in tons;

    l. Rolling 12-calendar month mass emissions of carbon monoxide (CO), in tons.

    m. Rolling 12 calendar month mass emissions of volatile organic compound (VOC), in tons;

    n. Natural gas flow rate to turbine in hscf/hr.

    o. Average concentration of ammonia slip emission for each clock- hour period, in parts per million by volume (ppmv) corrected to 15% oxygen, calculated in accordance with Condition 24.
    (Rule 69.3.1)

57. When the CEMS is not recording data and the turbine is operating, hourly NOx emissions for the annual emission calculations shall be determined in accordance with 40 CFR 75 Subpart C. Additionally, hourly CO emissions for annual emission calculations shall be determined using CO emission factors to be determined from source test emission factors, recorded CEMS data, and fuel consumption data, in terms of pounds per hour of CO for the gas turbine. Emission calculations used to determine hourly emission rates shall be reviewed and approved by the District, in writing, before the hourly emission rates are incorporated into the CEMS emission data. (NSR)

58. Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence. (CA Health and Safety Code)

59. The CEMS shall be maintained and operated, and reports submitted, in accordance with applicable federal requirements including Appendices B and F of 40 CFR Part 60, Appendices A and B of 40 CFR Part 75, 40 CFR Parts 75.10 and 75.12, and a CEMS Protocol approved by the District. [Rule 69.3.1]

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006780

PERMIT RECORD ID
APCD2011-PTO-000889

60. An operating log or data acquisition and handling system (DAHS) records shall be maintained either on site or at a District approved alternate location to record actual times and durations of all startups and shut-downs, quantity of fuel used (hscf) in each clock hour, calendar month and 12 calendar month period, hours of daily operation and total cumulative hours of operation during each calendar year. (NSR)
61. The District shall be notified at least two weeks prior to any changes made in CEMS software that affect the measurement, calculation or correction of data displayed and/or recorded by the CEMS. (NSR)
62. Except during periods when the ammonia injection system is being tuned or one or more ammonia injection systems is in manual control (for compliance with applicable permits), the automatic ammonia injection system serving the SCR shall be in operation in accordance with manufacturer's specifications at all times when ammonia is being injected into the SCR. Manufacturer specifications shall be maintained on site and made available to District personnel upon request. (NSR)
63. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District. (Rule 19)
64. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.
65. The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

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

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006781

PERMIT RECORD ID
APCD2011-PTO-000890

"APCD2011-PTO-000890"

Orange Grove Energy LP
Ramiro Garca
35435 East Pala Del Norte Rd
Pala CA 92059

EQUIPMENT ADDRESS
Orange Grove Energy LP
Ramiro Garcia
35435 East Pala Del Norte Rd
Pala CA 92059

PERMIT TO OPERATE
EXPIRES: October 31, 2021

This permit is not valid until required fees have been paid.

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

EQUIPMENT OWNER

J-Power USA Development Co. LTD Paul Peterson 35435 East Pala Del Norte Rd, Pala, CA 92059

EQUIPMENT DESCRIPTION

One natural gas simple cycle combustion turbine generator (Unit 2): General Electric, Model LM6000 PC SPRINT, nominal output 49.8 MW, S/N 191-638, with water injection, a selective catalytic reduction (SCR) unit with ammonia injection control system, an oxidation catalyst, data acquisition system (DAHS) and continuous emission monitoring system (CEMS).

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

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

BEC: APCD2021-CON-001847

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

1. In the event that the gas turbine engine with S/N 191-638 is removed from service for required repair, the permit holder may install an identical gas turbine (General Electric, Model LM-6000, 49.8 MW capacity) as a temporary replacement. The temporary gas turbine may be operated for a time period not to exceed 120 calendar days for each time the gas turbine with S/N 191-638 is repaired. This time period shall begin on the day that construction has been completed on the installation of the temporary replacement gas turbine. At least twenty-four (24) hours prior to operating the temporary replacement gas turbine, the permit holder shall notify the District, in writing that this construction has been completed. The time period shall end on the day that construction has been completed on the re-installation of the gas turbine with S/N 191-638 after it has been repaired. At least twenty-four (24) hours prior to operating the repaired gas turbine with S/N 191-638, the applicant shall notify the District, in writing, that this construction has been completed. The total duration of the time period shall be calculated from the date construction of the replacement gas turbine has been completed until the date reinstallation of the repaired gas turbine with S/N 191-638 has been completed, regardless of whether the temporary gas turbine operates on any individual day. The cumulative, total duration of operation of the temporary gas turbine under this condition shall not exceed 120 days in any consecutive 12-month period.

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006781

PERMIT RECORD ID
APCD2011-PTO-000890

2. At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of oxides of nitrogen (NOx) and carbon monoxide (CO), shall each not exceed 100 pounds per calendar day as determined by the NOx and CO Continuous Emissions Monitoring System (CEMS).
3. At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of volatile organic compounds shall not exceed 100 pounds per calendar day, as determined by the CO Continuous Emissions Monitoring System (CEMS) and the CO/VOC surrogate relationship.
4. At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of sulfur oxides (Sox) and particulate matter (PM10) shall each not exceed 100 pounds per calendar day, as determined by a source test or emissions calculations using emission factors or mass balance.
5. In the event that a source test or RATA is required to be conducted at the time a temporary engine is installed, the owner or operator shall be required to conduct any required tests using the temporary gas turbine and must conduct the same tests within 60 days of completing reinstallation of the repaired gas turbine with S/N 191-638.
6. The Emission unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The permittee shall maintain quarterly records of sulfur content (grains/100 dscf) and higher heating value (Btu/dscf) of the natural gas and provide such records to the District personnel upon request. [Rule 62 and/or 40 CFR 60 Subpart KKKK)
7. This equipment shall be properly maintained and kept in good operating condition at all times. (NSR)
8. The permittee shall operate the project in accordance with all data and specifications submitted with the application. (Rule 10)
9. For the purposes of this Permit to Operate, startup conditions shall be defined as the period of time that begins when fuel flows to the turbine and shall continue for no longer than 30 consecutive minutes. Shutdown conditions shall be defined as the 15 minute period preceeding the moment at which fuel flow ceases. The Data Acquisition and Handling System (DAHS), as required by 40 CFR75, shall record these events. This condition may be modified by the District based on field performance of the equipment. (NSR)
10. The permittee shall obtain any necessary District permits for all ancillary combustion equipment including emergency engines, prior to on-site delivery of the equipment. (Rule 10)
11. The exhaust stacks for the combustion turbines shall be at least 80 feet in height above site base elevation. (NSR)
12. The unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The permittee shall maintain quarterly records of sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas and provide such records to the District personnel upon request. (Rule 62 and/or 40 CFR 60 Subpart KKKK)
13. The permittee shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances. (40 CFR Part 73)
14. The total combined operating hours for the combustion turbines of Permit No. APCD2011-PTO-000889 and APCD2011-PTO-000890 shall not exceed 6,400 hours per calendar year. (NSR)
15. The permittee shall comply with the applicable requirements in 40 CFR Parts 60, 72, 73, and 75. (Rules 1412 and 1421)
16. For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periods shall be as specified herein. (Rule 69.3.1; Rule 21)
17. For the purposes of this Permit to Operate, startup conditions shall be defined as the period of time that begins when fuel flows to the turbine and shall continue for no longer than 30 consecutive minutes. Shutdown conditions shall be defined as the 15 minute period preceeding the moment at which fuel flow ceases. The Data Acquisition and Recording System (DAS), as required by 40 CFR75, shall record these events. This condition may be modified by the District based on field performance of the equipment. (NSR)
18. For each emission limit expressed as pounds per hour or parts per million based on a clock-hour averaging period, compliance shall be based on continuous emission data collected at least once every 15 minutes. (40 CFR Part 75; Rule 21)

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006781

PERMIT RECORD ID
APCD2011-PTO-000890

19. During startup conditions, the emissions from each unit exhaust stack shall not exceed the following emission limits as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing. Compliance with each limit shall be based on the startup period.
Pollutant Limit, lbs/event
Oxides of Nitrogen (NOx), calculated as NO2 13.25
Carbon Monoxide (CO) 12.05
Volatile Organic Compounds (VOC) 1.95
(NSR)

20. Emissions of nitrogen oxides from each unit exhaust stack shall not exceed 25 parts per million by volume, dry basis (ppmvd) at 15 percent O2 or 150 ng/J of useful output (1.2 lb/MWh) (4 hour average pursuant to 40 CFR § 60.4380(b)). This limit applies at all times including periods of startup and shutdown. [40 CFR 60 Subpart KKKK, Appendix Table 1]

21. Excess emissions shall be as defined in 40 CFR Subpart KKKK § 60.4380. An excess emission is any unit operating period, including periods of startup and shutdown, in which the 4-hour or 30-day rolling average NOx emission rate exceeds the applicable emission limit in 40 CFR 60 Subpart KKKK, Appendix Table 1.

22. For each affected unit required to continuously monitor parameters or emissions the permittee must submit to the District reports of excess emissions and monitor downtime, in accordance with 40 CFR 60 Subpart KKKK 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. Reports submitted pursuant to this requirement shall be postmarked no later than the 30th day following the end of the 6-month reporting period. 6-month reporting periods comprise January 1 through June 30, and July 1 through December 31. [40 CFR Subpart KKKK 60.4375(a)]

23. During shutdown conditions, the emissions from each unit exhaust stack shall not exceed the following emission limits as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing. Compliance with each limit shall be based on the shutdown period
Pollutant Limit, lbs/event
Oxides of Nitrogen (NOx), calculated as NO2 2.68
Carbon Monoxide (CO) 4.43
Volatile Organic Compounds (VOC) 0.73
(NSR)

24. The emissions concentration of oxides of nitrogen (NOx) from the unit exhaust stack, calculated as nitrogen dioxide (NO2), shall not exceed 2.5 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over a clock hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based on source testing calculated as the average of three subtests. This limit shall not apply during startup and shutdown conditions as defined herein. (NSR)

25. The emissions concentration of carbon monoxide (CO) from the unit exhaust stack shall not exceed 6.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over a clock-hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based upon source testing calculated as the average of three subtests. This limit shall not apply during startup and shutdown conditions as defined herein. (NSR)

26. The volatile organic compounds (VOC) emission concentration from the unit exhaust stack, calculated as methane, measured in the exhaust stack, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over each clock-hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based on source testing calculated as the average of three subtests. At the time of the initial compliance test, a District-approved CO/VOC surrogate relationship shall be established. The CO/VOC surrogate relationship shall be verified and/or modified, if necessary, based on annual source testing. This limit shall not apply during startup and shutdown conditions as defined herein. (NSR)

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006781

PERMIT RECORD ID
APCD2011-PTO-000890

27. The emissions from each unit exhaust stack shall not exceed the following emission limits, except during startup and shutdown conditions, as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a clock-hour averaging period.
    Pollutant Limit, lbs/hour
    Oxides of Nitrogen (NOx), calculated as NO2 4.3
    Carbon Monoxide (CO) 6.1
    Volatile Organic Compounds (VOC) 1.3
    (NSR)

28. The emissions from each unit exhaust stack shall not exceed the following emission limits, as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a calendar day averaging period.
    Pollutant Limit, lbs/day
    Oxides of Nitrogen (NOx), calculated as NO2 141.2
    Carbon Monoxide (CO) 182.2
    Volatile Organic Compounds (VOC) 36.5
    (NSR)

29. The discharge of total particulate matter from the unit exhaust stack of the combustion turbine shall not exceed 0.10 grains per dry standard cubic foot standardized to 12% CO2. The District may require periodic testing to verify compliance with this standard. (Rule 53)

30. The emissions from each unit exhaust stack shall not exceed the following emission limits, as determined by the continuous emission monitoring system (CEMs) and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a rolling 12 calendar month averaging period, updating once each calendar month. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter.
    Pollutant Limit, tons/year
    Oxides of Nitrogen (NOx), calculated as NO2 8.6
    Carbon Monoxide (CO) 11.3
    Volatile Organic Compounds (VOC) 2.3
    (NSR)

31. Emissions of particulate matter 10 microns or less (PM10) from the unit exhaust stack shall not exceed 3.0 lbs per hour. Compliance with this limit shall be demonstrated based upon initial source testing calculated as the average of three subtests. The total PM and condensable PM measured using EPA Method 5 and 202 will be assumed to be PM10. (NSR; Rule 21)

32. Fuel flowmeters with an accuracy of +/- 2% shall be maintained to measure the volumetric flow rate corrected for temperature and pressure. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR part 75, Appendix D, and Section 2.1.6. (Rule 69.3.1)

33. Visible emissions, including emissions from the lube oil vents and the exhaust stack of the unit shall not exceed 20% opacity, excluding water vapor, for more than three (3) minutes in any period of 60 consecutive minutes. (Rule 50)

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006781

PERMIT RECORD ID
APCD2011-PTO-000890

34. Total aggregate emissions from all stationary emission units at this stationary source, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1), shall not exceed the following limits in each rolling 12-calendar month period. The total aggregate emissions shall include emissions during all times that the equipment is operating, including but not limited to, emissions during periods of commissioning, startup, shutdown and tuning. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter.
i. Oxides of Nitrogen (NOx): 49.5 tons/year
ii. Carbon Monoxide (CO): 99 tons/year
iii. Volatile Organic Compounds (VOC): 49.5 tons/year
iv. Oxides of Sulfur (SOx): 99 tons/year
v. Particulate Matter (PM10) 99 tons/year
(NSR)

35. The emissions of any single federal Hazardous Air Pollutant (HAP) shall not equal or exceed 9.9 tons, and the aggregate emissions of all federal HAPs shall not equal or exceed 24.75 tons in any rolling 12-calendar month period. Compliance with these single and aggregate HAP limits shall be based on a methodology approved by the District for the purpose of calculating HAP emissions for this permit. If emissions exceed these limits, the permittee shall apply to amend this permit to reflect applicable federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR Part 63. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter. (40 CFR Part 63)

36. Before operating an SCR system, continuous monitors shall be installed on each SCR system to monitor or calculate, and record the ammonia injection rate (lbs/hour) and the SCR catalyst temperature (°F). The monitors shall be installed, calibrated and maintained in accordance with a District approved protocol. This protocol, which shall include the calculation methodology, shall be submitted to the District for written approval at least 60 days prior to initial startup of the gas turbines with the SCR system. The monitors shall be in full operation at all times when the turbine is in operation. (NSR)

37. Except during startup and shutdown conditions, the water injection system, the SCR system and oxidation catalyst control system, including the ammonia injection system serving the turbine, shall be in full operation at all times when the turbine is in operation. (NSR)

38. All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request. (Rule 1421)

39. In the event of a breakdown in an automatic ammonia injection control system, the unit shall be shut down or a trained operator shall operate the ammonia injection control system manually and the breakdown shall be reported to the District Compliance Division pursuant to Rule 98(B)(1) and 98(E). (Rule 98)

40. The concentration of ammonia solution used in the ammonia injection system shall be less than 20% ammonia by weight. Records of ammonia deliveries and ammonia solution concentration shall be maintained on site and made available to District personnel upon request. (Rule 1200)

41. The permittee shall submit a source test protocol to the District for approval. The source test protocol shall comply with the following requirements:
a. Measurements of NOX, CO, and O2 emissions shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) methods 7E, 10, and 3A, respectively, and district Source Test, method 100, or alternative methods approved by the District;
b. Measurement of VOC emissions shall be conducted in accordance with EPA Methods 25A and/or 18, or alternative methods approved by the District;
c. Measurements of PM-10 emissions shall be conducted in accordance with EPA Methods 5 and 201A or 202, or alternative methods approved by the district;
d. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management District ST-1B or an alternative method approved by the District;
e. Source testing shall be performed at the normal load level, as specified in 40 CFR part 75 Appendix A Section 6.5.2.1.d, provided it is not less than 80% of the unit's rated load unless it is demonstrated to the satisfaction of the district that the unit cannot operate under these conditions . If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous level power level.
f. Measurements of opacity shall be conducted in accordance with EPA Method 9 or an alternative method approved by the District.
g. Measurement of fuel flow shall be conducted in accordance with an approved test protocol.
(Rule 69.3.1; Rule 21)

42. Each turbine shall be equipped with continuous monitors to measure or calculate, and record, the following operational characteristics of each unit:
i. Hours of operation (hours),
ii. Natural gas flow rate (scfh),
iii. Heat input rate (MMBtu /hr),
iv. Exhaust gas temperature (ºF),
v. Power output (gross MW).
vi. Water (for NOx control) injection rate (gal/hour) if equipped with water injection.
vii. SCR inlet temperature (°F)
viii. Ammonia injection rate (gal/hour)
(NSR; Rule 21)

43. A CEMS Protocol is a document approved in writing by the APCD M&TS Division that describes the quality assurance and quality control procedures for monitoring, calculating and recording stack emissions from the unit. (Rule 69.3.1; Rule 21)

44. The permittee shall submit a turbine operation monitoring protocol, which shall include relevant calculation methodologies to the District for written approval. The monitors shall be installed, calibrated, and maintained in accordance with the protocol. The monitors should be in full operation at all times when the turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request. The permittee shall make the site available for inspection of the turbine operation monitors and monitor maintenance records by representatives of the District, CARB, and the California Energy Commissions. (Rule 69.3.1; NSR; Rule 21)

45. The exhaust stacks for each turbine shall be equipped with source test ports and platforms to allow for the measurement and collection of stack gas samples consistent with all approved test protocols. The ports and platforms shall be constructed in accordance with District Method 3A, Figure 2, and approved by the District. (Rule 19)

46. If source testing will be performed by an independent contractor and witnessed by the District, a source test protocol shall be submitted to the District for written approval at least 30 days prior to source testing. (Rule 69.3.1)

47. Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the District for review and approval. (Rule 69.3.1)

48. This unit shall be source tested to demonstrate compliance with the NOx, CO, VOC, and Ammonia emission standards of this permit, using District approved methods. The source test and the NOx and CO RATA tests shall be conducted in accordance with the RATA frequency requirements of 40 CFR 75 Appendix B, Sections 2.3.1 and 2.3.3. (NSR, Rule 1200)

49. The permittee shall comply with the continuous emission monitoring requirements of 40 CFR Part 75. (40 CFR Part 75; Rule 21)

50. At least 60 days prior to the operation of the CEMs, the permittee shall submit a CEMs operating protocol to the District for written approval. The permittee shall make the site available for inspection of the CEMs and CEMs maintenance records by representatives of the District, CARB, and the California Energy Commission. (Rule 69.3.1)

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

52. A Relative Accuracy Test Audit (RATA) and other required certification tests shall be performed and completed on the CEMs in accordance with 40 CFR Part 75 Appendix A Specifications and Test Procedures. At least 30 days prior to the test date, the permittee shall submit a test protocol to the District for written approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present. Within 45 days of completion of this test, a written test report shall be submitted to the District for approval. (40 CFR Part 75)

53. The Oxides of Nitrogen (NOx) and Oxygen (O2) CEMs shall be certified and maintained in accordance with applicable Federal Regulations including the requirements of:

    a. -Sections 75.10 and 75.12 of Title 40 Code of Federal Regulations Part 75 (40 CFR 75).

    b. -The performance specifications of Appendix A of 40 CFR 75.

    c. -The quality assurance procedures of Appendix B of 40 CFR 75.

    d. -The CEMs protocol approved by the District.

    The Carbon Monoxide (CO) CEMS shall be certified and maintained in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit. (Rule 69.3.1)

54. Ammonia emissions from each unit exhaust stack shall not exceed 5 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen, averaged over a clock-hour period. This limit shall not apply during startup and shutdown conditions. Compliance with this limit shall be demonstrated through source testing calculated as the average of three subtests and utilizing one of the following procedures:
    a. Calculate ammonia emissions using the following equation:
    NH3 = ((a-(b * c/1,000,000)) * (1,000,000/b)) * d
    Where: a = ammonia injection rate (lbs/hour) / (17.0 lbs/lb-mole),
    b = exhaust flow rate at 15% oxygen / (29 lbs/lb-mole)
    c = change in measured NOx concentration (ppmvd @ 15% Oxygen) across the catalyst,
    d = ratio of measured ammonia slip to calculate ammonia slip as derived during compliance testing.
    b. Calculate ammonia emissions using the following equation:
    NH3 = (((a / b) * 1,000,000) - 1.2c) * d
    Where: a = ammonia injection rate (lbs/hour) / (0.04478 lbs NH3 / cft NH3),
    b = exhaust flow rate at 15% oxygen (scft/hour),
    c = change in measured NOx concentration (ppmvd @ 15% Oxygen) across the catalyst,
    d = ratio of measured ammonia slip to calculated ammonia slip as derived during compliance testing. (Rule 1200)

55. The CEMS shall be in operation in accordance with the District approved CEMs monitoring protocol at all times when the turbine is in operation. A copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request. (Rule 69.3.1)

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006781

PERMIT RECORD ID
APCD2011-PTO-000890

"APCD2011-PTO-000890"

56. Continuous emission monitoring system (CEMS) shall be installed and properly maintained and calibrated to measure, calculate and record the following, in accordance with the District approved CEMS protocol:

a. Percent oxygen (O2) in the exhaust gas (%);

b. Average concentration of oxides of nitrogen (NOx) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen;

c. Average concentration of carbon monoxide (CO) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen;

d. Average concentration of volatile organic compound (VOC) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen, based on the CO/VOC surrogate relationship;

e. Clock hour mass emissions of oxides of nitrogen (NOx), in lbs/hour;

f. Clock hour mass emissions of carbon monoxide (CO), in lbs/hour;

g. Clock hour mass emissions of volatile organic compound (VOC) in lbs/hour, based on the CO/VOC surrogate relationship;

h. Calendar day mass emissions of oxides of nitrogen (NOx) in lbs/day;

i. Calendar day mass emissions of carbon monoxide (CO) in lbs/day;

j. Calendar day mass emissions of volatile organic compounds (VOC) in lbs/day;

k. Rolling 12-calendar month mass emissions of oxides of nitrogen (NOx), in tons;

l. Rolling 12-calendar month mass emissions of carbon monoxide (CO), in tons.

m. Rolling 12 calendar month mass emissions of volatile organic compound (VOC), in tons;

n. Natural gas flow rate to turbine in hscf/hr.

o. Average concentration of ammonia slip emission for each clock- hour period, in parts per million by volume (ppmv) corrected to 15% oxygen, calculated in accordance with Condition 24.
(Rule 69.3.1)

57. When the CEMS is not recording data and the turbine is operating, hourly NOx emissions for the annual emission calculations shall be determined in accordance with 40 CFR 75 Subpart C. Additionally, hourly CO emissions for annual emission calculations shall be determined using CO emission factors to be determined from source test emission factors, recorded CEMS data, and fuel consumption data, in terms of pounds per hour of CO for the gas turbine. Emission calculations used to determine hourly emission rates shall be reviewed and approved by the District, in writing, before the hourly emission rates are incorporated into the CEMS emission data. (NSR)

58. Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence. (CA Health and Safety Code)

59. The CEMS shall be maintained and operated, and reports submitted, in accordance with applicable federal requirements including Appendices B and F of 40 CFR Part 60, Appendices A and B of 40 CFR Part 75, 40 CFR Parts 75.10 and 75.12, and a CEMS Protocol approved by the District. [Rule 69.3.1]

Sectors: 1, A
Site Record ID: APCD2007-SITE-06289
Application Record ID: APCD2021-APP-006781

PERMIT RECORD ID
APCD2011-PTO-000890

60. An operating log or data acquisition and handling system (DAHS) records shall be maintained either on site or at a District approved alternate location to record actual times and durations of all startups and shut-downs, quantity of fuel used (hscf) in each clock hour, calendar month and 12 calendar month period, hours of daily operation and total cumulative hours of operation during each calendar year. (NSR)
61. The District shall be notified at least two weeks prior to any changes made in CEMS software that affect the measurement, calculation or correction of data displayed and/or recorded by the CEMS. (NSR)
62. Except during periods when the ammonia injection system is being tuned or one or more ammonia injection systems is in manual control (for compliance with applicable permits), the automatic ammonia injection system serving the SCR shall be in operation in accordance with manufacturer's specifications at all times when ammonia is being injected into the SCR. Manufacturer specifications shall be maintained on site and made available to District personnel upon request. (NSR)
63. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District. (Rule 19)
64. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.
65. The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

EXHIBIT B

Requested Changes to CEC Conditions of Certification

CONDITIONS OF CERTIFICATION

AQ-SC1 Air Quality Construction Mitigation Manager (AQCMM): The project owner shall designate and retain an on-site AQCMM who shall be responsible for directing and documenting compliance with conditions **AQ-SC3, AQ-SC4,** and **AQ-SC5** for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities to one or more AQCMM Delegates. The AQCMM and AQCMM Delegates shall have full access to all areas of construction on the project site and linear facilities and shall have the authorityto stop any or all construction activities as warranted by applicable construction mitigation conditions. The AQCMM and AQCMM Delegates may have other responsibilities in addition to those described in this condition. The AQCMM shall not be terminated without written consent of the Compliance Project Manager (CPM).

Verification: At least 60 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval, the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM Delegates. The AQCMM and all Delegates must be approved by the CPM before the start of ground disturbance.

AQ-SC2 Air Quality Construction Mitigation Plan (AQCMP): The project owner shall provide an AQCMP, for approval, which details the steps that will be taken and the reporting requirements necessary to ensure compliance with conditions **AQ-SC3**, **AQ-SC4**, and **AQ-SC5**.

Verification: At least 60 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the CPM for approval. The CPM will notify the project owner of any necessary modifications to the plan within 30 days from the date of receipt. The AQCMP must be approved by the CPM before the start of ground disturbance.

AQ-SC3 Construction Fugitive Dust Control: The AQCMM shall submit documentation to the CPM in each Monthly Compliance Report (MCR) that demonstrates compliance with the following mitigation measures for the purposes of preventing all fugitive dust plumes from leaving the project site and linear facility routes. Any deviation from the following mitigation measures shall require prior CPM notification and approval:

1. All unpaved roads and disturbed areas in the project and lay down construction sites shall be watered as frequently as necessary to comply with the dust mitigation objectives of **AQ-SC4**. The frequency of watering may be reduced or eliminated during periods of precipitation.

2. No vehicle shall exceed 10 miles per hour on unpaved areas within the project and lay down construction sites.

3. The construction site entrances shall be posted with visible speed limit signs.

4. All construction equipment vehicle tires shall be inspected and washed as necessary to be cleaned and free of dirt prior to entering paved roadways.

5. Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.

6. All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.

7. All construction vehicles shall enter the construction site through the treated entrance roadways, unless an alternative route has been submitted to and approved by the CPM.

8. Construction areas adjacent to any paved roadway shall be provided with sandbags or other measures as specified in the Storm Water Pollution Prevention Plan (SWPPP) to prevent runoff to roadways.

9. All paved roads within the construction site shall be swept at least twice daily (or less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.

10. During any construction periods where Pala Del Norte Road is routinely used for vehicles existing the construction site, Pala Del Norte Road between the site exit and SR 76 shall be swept visually clean, using wet sweepers or air filtered dry vacuum sweepers, at least twice daily (or less during periods of precipitation) on days when construction activity occurs or on any other day when dirt from the construction site is visible on the road. Until the south project driveway is surfaced with crushed rock and the driveway concrete access apron has been constructed pursuant to design drawings C150 and C802 in Appendix 2-A of the Application for Certification, during any construction periods where the south project driveway is routinely used for vehicles exiting the construction site, the westbound lane of SR 76 between the south project driveway and Pala Del Norte Road shall be swept visually clean, using wet sweepers or air filtered dry vacuum sweepers, at least twice daily (or less during periods of precipitation) on days when construction activity occurs or on any other day when dirt from the construction site is visible on the road. CEC will waive this requirement for sweeping of SR 76 if Caltrans will not allow the applicant to operate sweeping equipment on the highway (*e.g.,* due to safety concerns). Shaker plates to reduce track out will be added to the exit from the site to SR 76 and, if needed, on the exit to Pala Del Norte Road.

11. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered or shall be treated with appropriate dust suppressant compounds.

12. All vehicles that are used to transport solid bulk material on public roadways and that have the potential to cause visible emissions shall be

provided with a cover or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least two feet of freeboard.

13. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.

14. Disturbed areas will be re-vegetated as soon as practical.

The fugitive dust requirements listed in this condition may be replaced with as stringent or more stringent methods as required by SDAPCD Rule 55 if that rule becomes effective prior to the completion of the project's construction activities.

Verification: The project owner shall include in the MCR 1) a summary of all actions taken to maintain compliance with this condition, 2) copies of any complaints filed with the air district in relation to project construction, and 3) any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this Condition. Such information may be provided via electronic format or disk at the project owner's discretion.

AQ-SC4 Dust Plume Response Requirement: The AQCMM or an AQCMM Delegate shall monitor all construction activities for visible dust plumes. Observations of visible dust plumes that have the potential to be transported 1) off the project site or 2) 200 feet beyond the centerline of the construction of linear facilities, or 3) within 100 feet upwind of any regularly occupied structures not owned by the project owner indicate that existing mitigation measures are not resulting in effective mitigation. The AQCMM or Delegate shall implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed:

Step 1: The AQCMM or Delegate shall direct more intensive application of the existing mitigation methods within 15 minutes of making such a determination.

Step 2: The AQCMM or Delegate shall direct implementation of additional methods of dust suppression if Step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination.

Step 3: The AQCMM or Delegate shall direct a temporary shutdown of the activity causing the emissions if Step 2 specified above fails to result in effective mitigation within one hour of the original determination. The activity shall not restart until the AQCMM or Delegate is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not

result upon restarting the shut-down source. The owner/operator may appeal to the CPM any directive from the AQCMM or Delegate to shut down an activity, provided that the shutdown shall go into effect within one hour of the original determination, unless overruled by the CPM before that time.

Verification: The AQCMP shall include a section detailing how the additional mitigation measures will be accomplished within the time limits specified.

AQ-SC5 Diesel-Fueled Engines Control: The AQCMM shall submit to the CPM, in the MCR, a construction mitigation report that demonstrates compliance with the following mitigation measures for the purposes of controlling diesel construction-related emissions. Any deviation from the following mitigation measures shall require prior CPM notification and approval.

A. All diesel-fueled engines used in the construction of the facility shall be fueled only with ultra-low sulfur diesel, which contains no more than 15 ppm sulfur.

B. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM showing that the engine meets the conditions set forth herein.

C. All construction diesel engines, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in Title 13, California Code of Regulations, section 2423(b)(1). The following exceptions for specific construction equipment items may be made on a case-by-case basis.

1. Equipment with non-Tier 2 engines that have tailpipe retrofit controls that reduce exhaust emissions of NOx and PM to no more than Tier 2 levels.

2. Tier 1 equipment will be allowed on a case-by-case basis only when the project owner has documented that no Tier 2 equipment or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete the project's construction. This shall be documented with signed written correspondence by the appropriate construction contractors along with documented correspondence with at least two construction equipment rental firms.

D. All heavy earthmoving equipment and heavy duty construction- related trucks with engines meeting the requirements of (c) above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.

E. All diesel heavy construction equipment shall not remain running at idle for more than five minutes, to the extent practical.

F. Construction equipment will employ electric motors when feasible.

Verification: The project owner shall include in the MCR (1) a summary of all actions taken to maintain compliance with this condition, (2) copies of all diesel fuel purchase records, (3) a list of all heavy equipment used on site during that month, including the owner of that equipment and a letter from each owner indicating that equipment has been properly maintained, and (4) any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion.

AQ-SC6 The project owner shall provide emission reduction mitigation to offset the project's NOx, PM10, SOx, and VOC emission increases at a ratio of 1:1. These emission reductions are based on the following maximum annual emissions for the facility (tons/yr).

Emission Reduction Credits/Pollutant	Tons/yr
NOx	6.86
PM10	3.76
SOx	0.40
VOC	1.70
Total Tons	12.72

Emission reductions can be provided in any one of the following methods in the following order of preference of their use:

1. The project owner can fund emission reductions through the Carl Moyer Fund in the amount of $16,000/ton, or final 2008 ARB Carl Moyer Program Guideline cost effectiveness cap value, for the total ton quantity listed in the above table, minus any tons offset using the other two listed methods, with an additional 20% administration fee to fund the SDAPCD and/or other responsible local agencies with jurisdiction within 25 miles of the project site to be used to find and fund local emission reduction projects to the extent feasible. Emission reduction projects funding by this method will be weighted for evaluation and selection, within the funding guideline value of $16,000/ton of reduction, based on the proximity of the emission reduction project and the relative health benefit to the local community surrounding the project site. Emission reduction project cost will not be a consideration for selection as long as the emission reduction project is within the proposed or approved 2008, or other year as applicable, Carl Moyer funding guideline value,

2. The project owner can fund other existing public agency regulated stationary or mobile source emission reduction programs or create a project specific fund to be administered through the SDAPCD or other local agency, which would provide surplus emission reductions. This funding shall include appropriate administrative fees as determined by the administering agency to obtain local emission reductions to the extent feasible. The project owner shall be responsible for demonstrating that

the amount of such funding meets the emission reduction requirements of this condition. Emission reduction projects funding by this method will be weighted for evaluation and selection based on the proximity of the emission reduction project and the relative health benefit to the local community surrounding the project site.

3. ERC certificates from emission reductions occurring in the San Diego Air Basin can be used to offset each pollutant on a 1:1 offset ratio basis only if local emission reduction projects are clearly demonstrated to be unavailable using methods 1 or 2 to meet the total emission reduction burden required by this condition. ERCs can be used on an interpollutant basis for SOx for PM10, NOx for VOC, and VOC for NOx, where the project owner will provide a letter from the SDAPCD that indicates the District's allowed interpollutant offset ratio, or PM10 for SOx ERCs can beused on a 1:1 basis.

Carl Moyer or other emission reduction funding shall be provided to the responsible agencies prior to the initiation of on-site construction activities. The project owner shall work with the appropriate agencies to target emission reduction projects in the project area to the extent feasible. Emission reduction project selection information will be provided to the CPM for review and comment. Unused administrative fees shall be used for additional emission reduction program funding. ERC certificates, if used, will be surrendered prior to first turbine fire.

Verification: The project owner shall submit to the CPM confirmation that the appropriate quantity of Carl Moyer Project or other emission reduction program funding and/or ERCs have been provided prior to initiation of on-site construction activities for emission reduction program funding and at least 30 days prior turbine first fire for ERCs. The project owner shall provide emission reduction project selection information to the CPM for review and comment at least 15 days prior to committing funds to each selected emission reduction project. The project owner shall provide confirmation that the level of emission reduction program funding will meet the emission reduction requirements of this condition.

AQ-SC7 The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. The project owner shall submit to the CPM any modification to any permit proposed by the District or U.S. EPA, and any revised permit issued by the District or U.S. EPA, for the project.

Verification: The project owner shall submit any proposed air permit modification to the CPM within five working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.

AQ-SC8 The project owner shall procure the latest model year water delivery trucks, or trucks retrofit with new model year engines, that meet California on-road vehicle emission standards; and the water delivery trucks shall be properly maintained and the engines tuned to the engine manufacturer's

specifications.

Verification: The project owner shall submit to the CPM information on the procured water delivery trucks that show compliance with this condition within 15 days of procuring the trucks. The project owner shall submit truck maintenance records for the year in the fourth quarter Quarterly Operation Reports (**AQ-SC11**) that show compliance with the maintenance provision of this condition.

AQ-SC9 The chiller cooling tower shall have a mist eliminator with a manufacturer guaranteed mist reduction rate of 0.001 percent or less of the water recirculation rate.

Verification: The project owner shall provide the CPM a copy of the manufacturer guarantee for the mist eliminator 30 days prior to installation of the chiller.

AQ-SC10 The chiller cooling tower water shall be tested for total dissolved solids and that data shall be used to determine and report the particulate matter emissions from the chiller cooling tower. The cooling tower water shall be tested at least once annually during the anticipated summer operation peak period (July through September).

Verification: The project owner shall provide the water quality test results and the chiller cooling tower emissions estimates to the CPM as part of the fourth quarter's quarterly operational report (AQ-SC11).

AQ-SC11 The project owner shall submit to the CPM Quarterly Operation Reports, following the end of each calendar quarter that include operational and emissions information as necessary to demonstrate compliance with the conditions of certification herein. The Quarterly Operation Report will specifically note or highlight incidences of noncompliance.

Verification: The project owner shall submit the Quarterly Operation Reports to the CPM and to the District, if requested, no later than 30 days following the end of each calendar quarter.

DISTRICT ~~AUTHORITY TO CONSTRUCT AND~~ PERMIT TO OPERATE CONDITIONS

Equipment Description - Permit to Operate No. APCD2011-PTO-000889: One natural gas simple cycle combustion turbine generator #1: Make General Electric, Model LM-6000 PC SPRINT, nominal output 49.8 MW, SN 191-617, with water injection, a selective catalytic reduction (SCR) unit with ammonia injection control system, an oxidation catalyst, data acquisition system and (DAHS) continuous emission monitoring system (CEMS)

Equipment Description—Permit to Operate No. APCD2011-PTO-000890: One natural gas simple cycle combustion turbine generator #2: Make General Electric, Model LM-6000 PC SPRINT, nominal output 49.8 MW, SN 191-638, with water injection, a selective catalytic reduction (SCR) unit with ammonia injection control system, an oxidation catalyst, data acquisition system (DAHS); and continuous

emission monitoring system (CEMS).

AQ-1 In the event that the gas turbine engine with S/N 191-617 or S/N 191-638 is removed from service for required repair, the permit holder may install an identical gas turbine (General Electric, Model LM-6000, 49.8 MW capacity) as a temporary replacement. The temporary gas turbine may be operated for a time period not to exceed 120 calendar days for each time the gas turbine with S/N 191-617 or S/N 191-638 is repaired. This time period shall begin on the day that construction has been completed on the installation of the temporary replacement gas turbine. At least twenty-four (24) hours prior to operating the temporary replacement gas turbine, the permit holder shall notify the District, in writing that this construction has been completed. The time period shall end on the day that construction has been completed on the re-installation of the gas turbine with S/N 191-617 or S/N 191-638 after it has been repaired. At least twenty-four (24) hours prior to operating the repaired gas turbine with S/N 191-617 or S/N 191-638, the applicant shall notify the District, in writing, that this construction has been completed. The total duration of the time period shall be calculated from the date construction of the replacement gas turbine has been completed until the date reinstallation of the repaired gas turbine with S/N 191-617 or S/N 191-638 has been completed, regardless of whether the temporary gas turbine operates on any individual day. The cumulative, total duration of operation of the temporary gas turbine under this condition shall not exceed 120 days in any consecutive 12-month period.

AQ-2 At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of oxides of nitrogen (NOx) and carbon monoxide (CO), shall each not exceed 100 pounds per calendar day as determined by the NOx and CO Continuous Emissions Monitoring System (CEMS).

AQ-3 At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of volatile organic compounds shall not exceed 100 pounds per calendar day, as determined by the CO Continuous Emissions Monitoring System (CEMS) and the CO/VOC surrogate relationship.

AQ-4 At all times when the temporary gas turbine is in operation, including periods of startup and shutdown, emissions of sulfur oxides (SOx) and particulate matter (PM10) shall each not exceed 100 pounds per calendar day, as determined by a source test or emissions calculations using emission factors or mass balance.

AQ-5 In the event that a source test or RATA is required to be conducted at the time a temporary engine is installed, the owner or operator shall be

required to conduct any required tests using the temporary gas turbine and must conduct the same tests within 60 days of completing reinstallation of the repaired gas turbine with S/N 191-617 or S/N 191-638.

AQ-61 This equipment shall be properly maintained and kept in good operating condition at all times.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-72 The project owner shall operate the project in accordance with all data and specifications submitted with the application.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Co.

AQ-83 Access, facilities, utilities, and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.

Verification: The project owner shall provide facilities, utilities, and safety equipment for source testing and inspections upon request of the District, ARB, and the Energy Commission.

AQ-94 The project owner shall obtain any necessary District permits for all ancillary combustion equipment including emergency engines, prior to on-site delivery of the equipment.

Verification: The project owner shall submit any proposed air permit modification to the CPM within five working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.

AQ-105 The exhaust stacks for the combustion turbines shall be at least 80 feet in height above site base elevation.

Verification: The project owner shall submit to the CPM for review the exhaust stack specification at least 60 days before the installation of the stack.

AQ-116 The units shall be fired on Public Utility Commission (PUC) quality natural gas only. The project owner shall maintain, on site, quarterly records of sulfur content (grains/100 dscf) and the higher and lower heating values (Btu/dscf) of the natural gas; and provide such records to the District personnel upon request.

Verification: The project owner shall submit the quarterly fuel sulfur content values in the in the Quarterly Operation Reports (**AQ-SC11**) and make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-127 The project owner shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO_2 allowances.

Verification: The project owner shall submit to the CPM and District the CTG annual operating data and SO2 allowance information demonstrating compliance with all applicable provisions of 40 CFR 73 as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-13~~8~~ The total combined operating hours for the combustion turbines of Permit No. SDAPCD2011-PTO-000889 and SDAPCD2011-PTO-000890 shall not exceed 6,400 hours per calendar year.

Verification: The project owner shall submit to the CPM and District the CTG annual operating data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports (**AQ-SC11**).

AQ-14~~9~~ The project owner shall comply with the applicable requirements in 40 CFR Parts 60, 72, 73, and 75.

Verification: The project owner shall submit to the CPM and District the CTG annual operating data demonstrating compliance with all applicable provisions of 40 CFR Parts 60, 72, 73, and 75 as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-15~~10~~ For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periodsshall be as specified herein.

Verification: The project owner shall provide the annual source test data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**), due in the quarter after the each year's source test report is completed. The project owner shall submit to the CPM for review and the District for approval a CEMS operating protocol at least 60 days prior to the operation the CEMS.

AQ-16~~11~~ For the purposes of this license, startup conditions shall be defined as the period of time that begins when fuel flows to the turbine and shall continue for no longer than 30 consecutive minutes. Shutdown conditions shall be defined as the 15 minute period preceding the moment at which fuel flow ceases. The Data Acquisition and Recording System (DAS), as required by 40 CFR75, shall record these events. This condition may be modified by the District based on field performance of the equipment.

Verification: The project owner shall submit to the CPM the CTG start-up and shutdown event duration data demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-17~~12~~ For each emission limit expressed as pounds per hour or parts per million based on a clock-hour averaging period, compliance shall be based on continuous emission data collected at least once every 15 minutes.

Verification: CEMS data summaries shall be submitted to the CPM as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-18~~13~~ During startup conditions, the emissions from each ~~turbine~~ unit exhaust stack shall not exceed the following emission limits as determined by the continuous emission monitoring system (CEMs), and/or District-approved emission testing. Compliance with each limit shall be based on the startup period.

Pollutant	**Limit, lbs/event**
Oxides of Nitrogen (NOx), calculated as NO_2	13.25
Carbon Monoxide (CO)	12.05
Volatile Organic Compounds (VOC)	1.95

Verification: The project owner shall submit to the CPM the CTG operating data demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-19~~14~~ Emissions of nitrogen oxides from each unit exhaust stack shall not exceed 25 parts per million by volume, dry basis (ppmvd) at 15 percent O_2 or 150 ng/J of useful output (1.2 lb/MWh) (4 hour average pursuant to 40 CFR § 60.4380(b)). This limit applies at all times including periods of startup and shutdown.

Verification: The project owner shall submit to the CPM demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC11).

AQ-20~~15~~ Excess emissions shall be as defined in 40 CFR Subpart KKKK § 60.4380. An excess emission is any unit operating period, including periods of startup and shutdown, in which the 4-hour or 30-day rolling average NOx emission rate exceeds the applicable emission limit in 40 CFR 60 Subpart KKKK, Appendix Table 1.

Verification: The project owner shall demonstrate compliance with this condition as part of the excess emissions reports (AQ-16).

AQ-21~~16~~ For each affected unit required to continuously monitor parameters or emissions the project owner must submit to the District reports of excess emissions and monitor downtime, in accordance with 40 CFR Subpart KKKK § 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. Reports submitted pursuant to this requirement shall be postmarked no later than the 30th day following the end of the 6-month reporting period. 6-month reporting periods comprise January 1 through June 30, and July 1 through December 31.

Verification: The project owner shall submit to the CPM demonstrating compliance with this condition. Reports submitted pursuant to this requirementshall be postmarked no later than the 30th day following the end of the 6-monthreporting period.

AQ-22~~17~~ During shutdown conditions, the emissions from each unit exhaust stack shall not exceed the following emission limits as determined by the

continuous emission monitoring system (CEMs), continuous monitor and/or District-approved emission testing. Compliance with each limit shall be based on the shutdown period.

Pollutant	Limit, lbs/event
Oxides of Nitrogen (NOx), calculated as NO_2	2.68
Carbon Monoxide (CO)	4.43
Volatile Organic Compounds (VOC)	0.73

Verification: The project owner shall submit to the CPM the CTG operating data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC11**).

AQ-23~~18~~ The emissions concentration of oxides of Nitrogen (NOx) from the unit exhaust stack, calculated as nitrogen dioxide (NO_2), shall not exceed 2.5 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen and averaged over each clock hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based on source testing calculated as the average of three subtests. This limit shall not apply during the initial commissioning period or startup and shutdown period or conditions periods as defined herein.

Verification: The project owner shall provide the source test data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**), due in the quarter after the source test report is completed. The project owner shall provide CEMS emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-24~~19~~ The emissions concentration of carbon monoxide (CO) from the unit exhaust stack shall not exceed 6.0 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen and averaged over each clock-hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based upon source testing calculated as the average of three subtests. This limit shall not apply during startup and shutdown conditions as defined herein.

Verification: The project owner shall provide the source test data to demonstrate compliance with this condition as part of the Quarterly Operation Report (**AQ-SC11**), due in the quarter after the source test report is completed. The project owner shall provide emissions data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-25~~20~~ The volatile organic compounds (VOC) emission concentration from the unit exhaust stack, calculated as methane, measured in the exhaust stack, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen and averaged over each clock-hour period. Compliance with this limit shall be demonstrated continuously based on the CEMs data and based on source testing, calculated as the average of three subtests. At the time of the initial compliance test, a District-approved CO/VOC surrogate

relationship shall be established. The CO/VOC surrogate relationship shall be verified and/or modified, if necessary, based on annual source testing. This limit shall not apply during startup and shutdown periods conditions as defined herein.

Verification: The project owner shall provide the source test data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**), due in the quarter after the source test report is completed.

AQ-26~~21~~ The emissions from each unit exhaust stack shall not exceed the following emission limits, except during startup and shutdown conditions, as determined by the continuous emission monitoring system (CEMs), and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a clock-hour averaging period.

Pollutant	**Limit, lbs/hour**
Oxides of Nitrogen (NOx), calculated as NO_2	4.3
Carbon Monoxide (CO)	6.1
Volatile Organic Compounds (VOC)	1.3

Verification: The project owner shall submit to the CPM the CTG operating and/or source test data demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-27~~22~~ The emissions from each ~~turbine~~ unit exhaust stack shall not exceed the following emission limits, as determined by the continuous emission monitoring system (CEMs), and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a calendar day averaging period.

Pollutant	**Limit, lbs/day**
Oxides of Nitrogen (NOx), calculated as NO_2	141.2
Carbon Monoxide (CO)	182.2
Volatile Organic Compounds (VOC)	36.5

Verification: The project owner shall submit to the CPM the CTG operating data demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**).

AQ-28~~23~~ The emissions from each ~~turbine~~ unit exhaust stack shall not exceed the following emission limits, as determined by the continuous emission monitoring system (CEMs), and/or District-approved emission testing, calculated as the average of three subtests. Compliance with each limit shall be based on a rolling 12-calendar-month averaging period, updating once each calendar month. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter.

Pollutant	Limit, tons/year
Oxides of Nitrogen (NOx), calculated as NO_2	8.6
Carbon Monoxide (CO)	11.3
Volatile Organic Compounds (VOC)	2.3

Verification: The project owner shall submit to the CPM the CTG operating data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports (**AQ-SC11**).

AQ-29~~24~~ Emissions of particulate matter 10 microns or less (PM10) from the unit exhaust stack shall not exceed 3.0 lbs per hour. Compliance with this limit shall be demonstrated based upon initial source testing calculated as the average of three subtests. The total PM and condensable PM measured using EPA Method 5 and 202 will be assumed to be PM10.

Verification: The project owner shall provide the source test data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**), due in the quarter after the source test report is completed.

AQ-30~~25~~ The discharge of total particulate matter from the unit exhaust stack of the combustion turbine shall not exceed 0.10 grains per dry standard cubic foot standardized to 12 percent CO_2. The District may require periodic testing to verify compliance with this standard.

Verification: The project owner shall provide the source test data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**), due in the quarter after the source test report is completed.

AQ-31~~26~~ Ammonia Hourly Monitoring Condition. Ammonia emissions from each turbine shall not exceed 5 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen, averaged over each clock-hour period. This limit shall not apply during startup and shutdown conditions. Compliance with this limit shall be demonstrated through source testing calculated as the average of three subtests and utilizing one of the following procedures:

1) Calculate ammonia emissions using the following equation:
   $NH_3 = ((a-(b*c/1{,}000{,}000))*(1{,}000{,}000/b))*d$
   Where:

   a = ammonia injection rate (lbs/hour) / (17.0 lbs/lb-mole),

   b = exhaust flow rate at 15% oxygen / (29 lbs/lb-mole),

   c = change in measured NOx concentration (ppmvd @ 15% oxygen) across the catalyst, and

   d = ratio of measured ammonia slip to calculate ammonia slip as derived during compliance testing.

2) Calculate ammonia emissions using the following equation:
NH_3 = (((a/b)*1,000,000)-1.2c)*d
Where:

a = ammonia injection rate (lbs/hour) / (0.04478 lbs NH3/cft NH3),

b = exhaust flow rate at 15% oxygen / (scft/hour),

c = change in measured NOx concentration (ppmvd @ 15% oxygen) across the catalyst, and

d = ratio of measured ammonia slip to calculated ammonia slip as derived during compliance testing.

Verification: The project owner shall provide the estimated daily ammonia concentration and daily ammonia emissions based on the procedures given in this condition and provide the annual source test data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**), where the source test data is due in the quarter after the source test report is completed.

AQ-32~~27~~ Visible emissions, including emissions from the lube oil vents and the exhaust stack of the unit shall not exceed 20 percent opacity, excluding water vapor, for more than three (3) minutes in any period of 60 consecutiveminutes. (Rule 50)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-33~~28~~ Total aggregate emissions from all stationary emission units at this stationary source, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1), shall not exceed the following limits in each rolling 12-calendar-month period. The total aggregate emissions shall include emissions during all times that the equipment is operating, including but not limited to, emissions during periods of commissioning, startup, shutdown, and tuning. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter.

1. Oxides of Nitrogen (NOx): 49.5 tons/year

2. Carbon Monoxide (CO): 99 tons/year

3. Volatile Organic Compounds (VOC): 49.5 tons/year

4. Oxides of Sulfur (SOx): 99 tons/year

5. Particulate Matter (PM10): 99 tons/year

Verification: The project owner shall submit to the CPM and District the facility annual operating and emissions data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports **(AQ-SC11)**.

AQ-34~~29~~ The emissions of any single federal Hazardous Air Pollutant (HAP) shall not exceed 9.9 tons, and the aggregate emissions of all federal HAPs shall not equal or exceed 24.75 tons in any rolling 12-calendar-month period. Compliance with these single and aggregate HAP limits shall be based on a methodology approved by the District for the purpose of calculating HAP emissions for this permit. If emissions exceed these limits, the project owner shall apply to amend this permit to reflect applicable federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR Part 63. Records demonstrating compliance with these limits shall be available for inspection 30 days after the end of each calendar quarter.

Verification: The project owner shall submit to the CPM and District the facility annual operating data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Reports **(AQ-SC11)**.

AQ-35~~30~~ Before operating an SCR system, continuous monitors shall be installed on each SCR system to monitor or calculate, and record the ammonia injection rate (lbs/hour) and the SCR catalyst temperature (°F). The monitors shall be installed, calibrated and maintained in accordance with a District approved protocol. This protocol, which shall include the calculation methodology, shall be submitted to the District for written approval at least 60 days prior to initial startup of the gas turbines with the SCR system. The monitors shall be in full operation at all times when the turbine is in operation.

Verification: The project owner shall provide a protocol as required in the condition for the installation, calibration, and testing for the SCR system continuous monitors at least 60 days prior to SCR system use. The project owner shall submit to the CPM and District the SCR system operating data demonstrating compliance with this condition as part of the Quarterly Operation Reports **(AQ-SC11).**

AQ-36~~31~~ Except during startup and shutdown conditions, the water injection system, the SCR system and oxidation catalyst control system, including the ammonia injection system serving the turbine, shall be in full operation at all times when the turbine is in operation.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-37~~32~~ Except during periods when the ammonia injection system is being tuned or one or more ammonia injection systems is in manual control (for compliance with applicable permits), the automatic ammonia injection system serving the SCR shall be in operation in accordance with manufacturer's specifications at all times when ammonia is being injected into the SCR. Manufacturer specifications shall be maintained on site and made available to District personnel upon request.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-38~~33~~ In the event of a breakdown in the an automatic ammonia injection control

system, the unit shall be shut down or a trained operator shall operate the ammonia injection control system manually and the breakdown shall be reported to the District Compliance Division pursuant to Rule 98(b)(1) and 98(e).

Verification: The project owner shall notify the District regarding any ammonia injection control system breakdown as required in this condition and shall document all such communications in each Quarterly Operation Report (**AQ-SC11**).

AQ-39~~34~~ The concentration of ammonia solution used in the ammonia injection system shall be less than 20 percent ammonia by weight. Records of ammonia deliveries and ammonia solution concentration shall be maintained on site and made available to District personnel upon request.

Verification: The project owner shall maintain on site and provide on request of the CPM or District the ammonia delivery records that demonstrate compliance with this condition.

AQ-40~~35~~ The permittee shall submit a source test protocol to the District for approval for any source test to determine compliance with the emission standards of this permit or any Relative Accuracy Test Audit (RATA) and other required certification tests for the CEMs. The source test protocol shall comply with the following requirements and any other applicable requirements of this permit:

A. Measurements of NOx, CO, and O_2 emissions shall be conducted in accordance with U.S. Environmental Protection Agency (U.S. EPA) methods 7E, 10, and 3A, respectively, and District Source Test, method 100, or alternative methods approved by the District ~~and U.S. EPA~~;

B. Measurement of VOC emissions shall be conducted in accordance with U.S. EPA Methods 25A and/or 18, or alternative methods approved by the District ~~and U.S. EPA~~;

C. Measurements of PM10 emissions shall be conducted in accordance with U.S. EPA Methods 5 and 201A or 202, or alternative methods approved by the District ~~and U.S. EPA~~;

D. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management District ST-1B or an alternative method approved by the District;

E Source testing shall be performed at the normal load level, as specified in 40 CFR part 75 Appendix A Section 6.52.1.d, provided it is not less than 80% of the unit's rated load unless it is demonstrated to the satisfaction of the District that the unit cannot operate under these conditions. If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous level power level.

F. Measurements of opacity shall be conducted in accordance with U.S. EPA Method 9 or an alternative method approved by the ~~District and U.S. EPA~~.

G. Measurement of fuel flow shall be conducted in accordance with an approved test protocol.

Verification: The project owner shall submit to the CPM for review and the District for approval the initial source test protocol in compliance with requirements of this condition at least 30 days prior to the initial source test.

AQ-41~~36~~ Each turbine shall be equipped with continuous monitors to measure or calculate, and record, the following operational characteristics of each unit:

i. Hours of operation (hours),

ii. Natural gas flow rate (scfh),

iii. Heat input rate (MMBtu /hr),

iv. Exhaust gas temperature (ºF), and

v. Power output (gross MW).

vi. Water (for NOx control) injection rate (gal/hour) if equipped with water injection.

vii. SCR inlet temperature (°F)

viii. Ammonia injection rate (gal/hour)

Verification: The project owner shall submit to the CPM for review and the District for approval a parametric monitoring protocol in compliance with this condition at least 60 days prior to the initial startup.

AQ-42~~37~~ A CEMS protocol is a document approved in writing by the SDAPCD M&TS division that describes the Quality Assurance and Quality Control procedures for monitoring, calculating and recording stack emissions from the unit.

Verification: The project owner shall maintain a copy of the CEMS protocol on site and provide it for inspection on request of the CPM or District.

AQ-43~~38~~ The project owner shall submit a turbine operation monitoring protocol, which shall include relevant calculation methodologies to the District for written approval. The monitors shall be installed, calibrated, and maintained in accordance with the protocol. The monitors should be in full operation at all times when the turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request. The project owner shall make the site available for inspection of the turbine operation monitors and monitor maintenance records by representatives of the District, ARB, and the Energy Commission.

Verification: The project owner shall submit to the CPM for review and the District for approval a turbine operation monitoring protocol in compliance with this condition at least 60 days prior to the initial startup.

AQ-44~~39~~ The exhaust stacks for each turbine shall be equipped with source test ports and platforms to allow for the measurement and collection of stack gas samples consistent with all approved test protocols. The ports and platforms shall be constructed in accordance with District Method 3A, Figure 2, and approved by the District.

Verification: The project owner shall submit to the CPM for review and District for approval a stack test port and platform plan at least 60 days before the installation of the stack ports and platform.

AQ-45~~40~~ If source testing will be performed by an independent contractor and witnessed by the District, a source test protocol shall be submitted to the District for written approval at least 30 days prior to source testing.

Verification: The project owner shall submit to the CPM for review and District for approval, if necessary based on the condition requirements, a source test protocol at least 30 days prior to the source test.

AQ-46~~41~~ Within ~~30~~ 45 days after completion of a renewal source test or RATA performed by an independent contractor, a final, written test report shall be submitted to the District for review and approval.

Verification: The project owner will submit all RATA or source test reports to the CPM for review and the District for approval within 45 days of the completion of those tests.

AQ-47~~42~~ These units shall be source tested to demonstrate compliance with the NOx, CO, VOC, and ammonia emission standards of this license**,** using District approved methods. The source test and the NOx and CO RATA tests shall be conducted in accordance with the RATA frequency requirements of 40 CFR 75, Appendix B, Sections 2.3.1 and 2.3.3.

Verification: The results and field data collected during source tests required by this condition shall be submitted to the CPM for review and the District for approval within 30 days of testing.

AQ-48~~43~~ The project owner shall comply with the continuous emission monitoring requirements of 40 CFR Part 75.

Verification: The project owner shall submit to the CPM for review and the District for approval a CEMS monitoring protocol at least 60 days prior to the operation the CEMS.

AQ-49~~44~~ At least 60 days prior to the operation of the CEMs, the project owner shall submit a CEMs operating protocol to the District for written approval. The project owner shall make the site available for inspection of the CEMs and CEMs maintenance records by representatives of the District, ARB, and the Energy Commission.

Verification: The project owner shall submit to the CPM for review and the District for approval a CEMS operating protocol at least 60 days prior to the operation the CEMS.

AQ-5045 A monitoring plan in conformance with 40 CFR 75.53 shall be submitted to U.S. EPA Region 9 and the District at least 45 days prior to the Relative Accuracy Test Audit test, as required in 40 CFR 75.62.

Verification: The project owner shall submit to the CPM for review and the District for approval a monitoring plan in compliance with this condition at least 45 days prior to the RATA test.

AQ-5146 A Relative Accuracy Test Audit (RATA) and other required certification tests shall be performed and completed on the CEMs in accordance with 40 CFR Part 75 Appendix A ~~and B and 40 CFR §60.4405 and on the CO CEMS in accordance with applicable provisionsof 40 CFR Part 60 Appendix B and F~~ Specifications and Test Procedures. At least 30 days prior to the test date, the project owner shall submit a test protocol to the District for written approval. Additionally, the District shall be notified a minimum of 21 days priorto the test so that observers may be present. Within ~~30~~ 45 days of completion of this test, a written test report shall be submitted to the District for approval.

Verification: The project owner shall submit to the CPM for review and the District for approval the RATA certification test protocol at least 30 days prior to the RATA test and shall submit to the CPM for review and the District for approval a copy of the written test report within 45 days after test completion The project owner shall also notify the CPM and District of the RATA test date at least 21 days prior to conducting the RATA and other certification tests.

AQ-5247 The oxides of nitrogen (NOx) and oxygen (O_2) CEMS shall be certified and maintained in accordance with applicable Federal Regulations including the requirements of:

a. Sections 75.10 and 75.12 of Title 40, Code of Federal Regulations Part 75 (40 CFR 75);

b. The performance specifications of Appendix A of 40 CFR 75;

c. The quality assurance procedures of Appendix B of 40 CFR 75;

d. The CEMS protocol approved by the District.

The carbon monoxide (CO) CEMS shall be certified and maintained in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit.

Verification: The project owner shall submit to the CPM for review and the District for approval a CEMS operating protocol as required by **AQ-43**. The project owner shall make the site available for inspection of records by representatives of the District,ARB,

and the Energy Commission.

AQ-~~53~~48 Continuous emission monitoring system (CEMS) shall be installed and properly maintained and calibrated to measure, calculate and record the following, in accordance with the District approved CEMS protocol:

A. Percent oxygen (O_2) in the exhaust gas (%);

B. Average concentration of oxides of nitrogen (NOx) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen;

C. Average concentration of carbon monoxide (CO) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen;

D. Averaged concentration of volatile organic compound (VOC) for each clock-hour period, in parts per million (ppmv) corrected to 15% oxygen, based on the CO/VOC surrogate relationship;

E. Clock hour mass emissions of oxides of nitrogen (NOx), in lbs/hour;

F. Clock hour mass emissions of carbon monoxide (CO), in lbs/hour;

G. Clock hour mass emissions of volatile organic compound (VOC) in lbs/hour, based on the CO/VOC surrogate relationship;

H. Calendar day mass emissions of oxides of nitrogen (NOx) in lbs/day;

I. Calendar day mass emissions of carbon monoxide (CO) in lbs/day;

J. Calendar day mass emissions of volatile organic compounds (VOC) in lbs/day;

K. Rolling 12-calendar month mass emissions of oxides of nitrogen (NOx), in tons;

L. Rolling 12-calendar month mass emissions of carbon monoxide (CO), in tons;

M. Rolling 12-calendar month mass emissions of volatile organic compound (VOC), in tons;

N. Natural gas flow rate to turbine in hscf/hr;

O. Average concentration of ammonia slip emission for each clock-hour period, in parts per million by volume (ppmv) corrected to 15 percent oxygen, calculated in accordance with the Ammonia Hourly Monitoring Condition 24.

Verification: The project owner shall submit to the CPM for review and the District for approval a CEMS operating protocol as required by **AQ-43**. The project owner shall make the site available for inspection of records by representatives of the District,ARB,

and the Energy Commission.

AQ-54~~49~~ The CEMS shall be in operation in accordance with the District approved CEMs monitoring protocol at all times when the turbine is in operation. A copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-55~~50~~ When the CEMS is not recording data and the turbine is operating, hourly NOx emissions for the annual emission calculations shall be determined in accordance with 40 CFR 75 Subpart C. Additionally, hourly CO emissions for annual emission calculations shall be determined using CO emission factors to be determined from source test emission factors, recorded CEMS data, and fuel consumption data, in terms of pounds per hour of CO for the gas turbine. Emission calculations used to determine hourly emission rates shall be reviewed and approved by the District, in writing, before the hourly emission rates are incorporated into the CEMS emission data.

Verification: The project owner shall provide the District with all emission calculations required by this condition and shall provide notation of when such calculations are used in place of CEMS data as part of the Quarterly Operation Report (**AQ-SC11**).

AQ-56~~51~~ Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence. (CA Health and Safety Code).

Verification: The project owner shall notify the District regarding any emission standard violation as required in this condition and shall document all such occurrences in each Quarterly Operation Report (**AQ-SC11**).

AQ-57~~52~~ The CEMS shall be maintained and operated, and reports submitted, in accordance with applicable federal requirements including Appendices B and F of 40 CFR Part 60, Appendices A and B of 40 CFR Part 75, 40 CFR Parts 75.10 and 75.12, and a CEMS Protocol approved by the District.

Verification: The project owner shall submit to the District the CEMS reports as required in this condition and shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-58~~53~~ An operating log or data acquisition and handling system (DAHS) records shall be maintained either on site or at a District-approved alternate location to record actual times and durations of all startups and shut-downs, quantity of fuel used (hscf) in each clock hour, calendar month and 12-calendar-month period, hours of daily operation and total cumulative hours of operation during each calendar year.

Verification: The operating log or DAHS operating records will be provided as part of the Quarterly Operation Report (**AQ-SC11**). The project owner shall make the site

available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-59~~54~~ The District shall be notified at least two weeks prior to any changes made in the CEMS software that affect the measurement, calculation or correction ofdata displayed and/or recorded by the CEMS.

Verification: The project owner shall submit to the CPM for review and the District for approval any revision to the CEMS/DAHS software, as required by this condition, to be approved in advance at least two weeks before any planned changes are made.

AQ-60~~55~~ Fuel flow meters with an accuracy of +/- 2% shall be maintained to measure the volumetric flow rate corrected for temperature and pressure. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flow meters shall meet the applicable quality assurance requirements of 40 CFR part 75, Appendix D, and Section 2.1.6.

Verification: The project owner shall submit to the CPM the natural gas usage data from the fuel flow meters as part of the Quarterly Operation Report (**AQ-SC11**).

AQ-61~~56~~ All records required by these conditions this written permit shall be maintained on site for a minimum of five years and made available to the District upon request.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-62~~57~~ The Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

Verification: None required.

AQ-63~~58~~ The project owner shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

Verification: The project owner shall certify compliance with this condition as part of the fourth quarter's Quarterly Operation Report (AQ-SC11) and shall makethe site and data available for inspection by representatives of the District, ARB, and the Energy Commission.

~~**AQ-59** Notwithstanding any other condition of this permit, for each turbine, notlater than 60 calendar days after completion of the repair and maintenance of the emission control system as described in ApplicationNo. APCD2016-APP-004406, a source test and Relative Accuracy Test Audit (RATA) and applicable certification tests shall be conducted on the CEMS of each turbine to demonstrate compliance with the NOx, CO, VOC, and ammonia emission standards of this permit and applicable relative accuracy requirements and certifications for the NOx and CO CEMS using District approved methods. The source test shall be conducted in accordance with a protocol complying~~

with all the applicable requirements for source test protocols as specified in this permit.

Verification: The project owner shall submit to the CPM for review and the District for approval the source test, RATA, and applicable certification test protocol at least 30 days prior to the tests and shall submit to the CPM for reviewand the District for approval a copy of the written test report within 30 days after test completion. The project owner shall also notify the CPM and District of the test date at least 21 days prior to conducting the RATA and other certification tests.

AQ-60 Unless a later date is approved in writing by the District, not later than 30 calendar days prior to the start of the repair and maintenance projectthe project owner shall submit to the District the final selection of the catalyst manufacturers and design parameters and details of the selective catalytic reduction (SCR) and oxidation catalyst emission control systems for the combustion turbines. Unless the District approves an alternative, the submittal shall include at a minimum the type of catalyst; active catalyst material; catalyst volume per turbine; and control efficiency of the SCR for NOx and the control efficiency of the oxidation catalyst for VOCs and CO at temperatures between 100 ºF and 1000 ºF at a space velocity corresponding to 100% load. Such information may be submitted to the District as trade secret and confidential pursuant to District Rules 175 and 176.

Verification: Unless a later date is approved in writing by the District, not laterthan 30 calendar days prior to the start of the repair and maintenance project theproject owner shall submit to the CPM and the District the final selection of the catalyst manufacturers and design parameters and details of the SCR and oxidation catalyst emission control systems for the combustion turbines.

EMERGENCY BLACK START ENGINE: GAS 965 BRAKE HORSEPOWER (BHP), CUMMINS ENGINE, MODEL GTA38-G2, S/N X25328866, NATURAL GAS FUELED,EQUIPPED WITH MIRATECH CATALYTIC CONVERTER, MODEL RHS-4228-14-ECI, S/N RHS-1336 AND MIRATECH AIR TO FUEL RATIO CONTROLLER MODEL MEC-R.

AQ-BSE1 Access, facilities, utilities and any necessarysafety equipment, for source testing and inspection shall be provided upon request of the Air Pollution Control District.

Verification: The project owner shall provide facilities, utilities, and safety equipment for source testing and inspections upon request of the District, ARB, and the Energy Commission.

AQ-BSE2 Gaseous fuel engines shall use only gaseous fuel which contains no more than 10 grains of sulfur compounds, calculated as hydrogen sulfide, per 100 cubic feet of dry gaseous fuel at standards conditions. Gaseous fuels include natural gas, propane, liquefied petroleum gas (LPG), butane. Gasoline engines shall use only California Reformulated Gasoline. (Rule 62).

Verification: The project owner shall make the site available for inspection of

records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE3 Visible emissions including crank case smoke shall comply with Rule 50. (Rule 50)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE4 At no time shall the subject equipment described cause or contribute to a public nuisance. (Rule 51)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE5 A non-resettable engine hour meter shall be installed on this engine, maintained in good working order, and used for recording engine operating hours. If a meter is replaced, the Air Pollution Control District's Compliance Division shall be notified in writing within 10 calendar days. The written notification shall include the following information:

A. Old meter's hour reading.

B. Replacement meter's manufacturer name, model, and serial number if available and current hour reading on replacement meter.

C. Copy of receipt of new meter or of installation work order. A copy of the meter replacement notification shall be maintained on site and made available to the Air Pollution Control District upon request. (Rule 69.4.1.)

Verification: The project owner shall provide notification to the District as required by this condition and shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE6 The engine shall be operated exclusively during emergencies or for testing and maintenance. Engine operation shall not exceed 0.5 hours per day and 52 hours per calendar year for non-emergency purposes (testing and maintenance). Emergency use is not limited. (NSR, Rule 69.4.1, 40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall submit to the CPM the black-start engine operating data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC11**).

AQ-BSE7 The owner or operator shall conduct periodic maintenance of this engine and any add-on control equipment, as applicable, as recommended by the engine and control equipment manufacturer or as specified by any other maintenance procedure approved in writing by the District. The periodic maintenance shall be conducted at least once each calendar year. (Rule 69.4.1, 40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE8 The owner or operator shall change engine oil and filter every 500 hours of operation or annually, whichever comes first; or test the oil inaccordance with 40 CFR § 63.6625(i). (40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE9 The owner or operator shall inspect the air cleaner of a compression ignition engine or inspect spark plugs of a spark ignition engine, every 1,000 hours of operation or annually, whichever comes first, and replaceas necessary. (40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE10 The owner or operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace asnecessary. (40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE11 The owner or operator of this engine shall keep the followingrecords:

- applicable fuel certification
- manual of recommended maintenance provided by the manufacturer
- or other maintenance procedure as approved in writing, in advance, by theDistrict.

These records shall be kept on-site for at least the same period of time as the engine to which the records apply is located at the site. These records shall be made available to the District upon request. (Rule 69.4.1)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE12 The owner or operator of this engine shall maintain an operating log containing, at a minimum, the following:

- dates and times of engine operation, indicating whether the operation was for non- emergency purposes or during an emergency situation and the nature of the emergency, if available (these records are not required if the total engine operations for any purpose, including emergency situation, do not exceed 52 hours in a calendar year);
- total cumulative hours of operation per calendar year, based on actual readings of engine hour or fuel meter;
- records of periodic maintenance including the dates maintenance, was performed.(Rule 69.4.1)

Verification: The project owner shall make the site available for inspection of

records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE13 Fuel, all operational and maintenance logs required by this permit shallbe kept for a minimum of three years, unless otherwise indicated by the conditions of this permit, and these records shall be made available to the District upon request. (Rule 69.4.1)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-BSE14 The Air Pollution Control District Permit does not relieve the holderfrom obtaining permits or authorizations required by other governmental agencies.

Verification: None required.

AQ-BSE15 The project owner shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and AssessmentAct (California Health and Safety Code Section 44300 et seq.)

Verification: The project owner shall certify compliance with this condition as part of the fourth quarter's Quarterly Operation Report (AQ-SC11) and shall make the site and data available for inspection by representatives of the District, ARB,and the Energy Commission.

EMERGENCY FIRE PUMP ENGINE: 373 BHP CUMMINS, MODEL CFP11E-F10, BASED ON CUMMINS DIESEL ENGINE MODELQSM11, S/N 35229758, MODEL YEAR 2008, EPA TIER 2 CERTIFIED OF ENGINE FAMILY NUMBER 4CEXL0661AAD.

AQ-FP1 Access, facilities, utilities and any necessarysafety equipment, for source testing and inspection shall be provided upon request of the Air Pollution Control District.

Verification: The project owner shall provide facilities, utilities, and safety equipment for source testing and inspections upon request of the District, ARB, and the Energy Commission.

AQ-FP2 The engine shall only use ARB Diesel Fuel. (Rule 69.4.1, 17 CCR §93115)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP3 The engine shall be operated exclusively during emergencies or for testing and maintenance. Engine operation for maintenance and testing purposes shall not exceed 0.5 hour per day and 50 hours per calendar year.(NSR17 CCR §93115; 40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall submit to the CPM the fire pump engine operating data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC11**).

AQ-FP4 The engine and any associated air pollution control equipment and monitoring equipment shall be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions (40CFR Subpart ZZZZ §63.6605(b)).

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP5 The owner or operator shall minimize engine operating time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30minutes. (40CFR Subpart ZZZZ §63.6625(h))

Verification: The project owner shall submit to the CPM the fire pump engine operating data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC11).

AQ-FP6 Visible emissions including crankcase smoke shall comply with Air Pollution Control District Rule 50. (Rule 50)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP7 The equipment described above shall not cause or contribute to a public nuisance. (Rule 51)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP8 This engine shall not operate for non-emergency use during the following periods, as applicable:

A. Whenever there is any school sponsored activity, if engine is located on school grounds, or

B. Between 7:30 AM and 3:30 PM on days when school is in session, if the engine is located within 500 feet of, but not on school grounds.

This condition shall not apply to an engine located at or near any school grounds that also serve as the students' place of residence**.** (17 CCR §93115)

Verification: The project owner shall submit to the CPM the engine operating data demonstrating compliance with this condition on request and shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP9 A non-resettable engine hour meter shall be installed on this engine, maintained in good working order, and used for recording engine operating hours. If a meter is replaced, the Air Pollution Control District's Compliance Division shall be notified in writing within 10 calendar days. The written notification shall include the following information:

A. Old meter's hour reading.

B. Replacement meter's manufacturer name, model, and serial number if available and current hour reading on replacement meter.

C. Copy of receipt of new meter or of installation work order. A copy of the meter replacement notification shall be maintained on site and made available to the Air Pollution Control District upon request.

(Rule 69.4.1,17 CCR §93115)

Verification: The project owner shall provide notification to the District as required by this condition and shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP10 The owner or operator of this engine shall conduct periodic maintenance of this engine and add-on control equipment, if any, as recommended bythe engine and control equipment manufacturers or as specified by the engine servicing company's maintenance procedures. The periodic maintenance shall be conducted at least once each calendar year. (Rule 69.4.1)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP11 The owner or operator shall change engine oil and filter every 500 hoursof operation or annually, whichever comes first; or test the oil in accordance with 40 CFR § 63.6625(i). (40 CFR 63 Subpart ZZZZ § 63.6603(a) and Table 2d(4)(b))

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP12 The owner or operator shall inspect the air cleaner of a compression ignition engine or inspect spark plugs of a spark ignition engine, every 1,000 hours of operation or annually, whichever comes first, and replaceas necessary. (40 CFR 63 Subpart ZZZZ § 63.6603(a) and Table 2d(4)(b))

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP13 The owner or operator shall inspect all hoses and belts every 500 hoursof operation or annually, whichever comes first, and replace as necessary. (40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP14 The owner or operator of the engine shall maintain the following records on site for at least the same period of time as the engine to which the records apply is located at the site:

A. Documentation shall be maintained identifying the fuel as ARB diesel;

B. Manual of recommended maintenance provided by the manufacturer, or maintenance procedures specified by the engine servicing company; and

C. Records of annual engine maintenance~~,~~ including ~~the~~ date the maintenance was performed.

These records shall be made available to the Air Pollution Control District upon request. (Rule 69.4.1) (17 CCR 93115)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP15 The owner or operator of this engine shall maintain a monthly operating log containing, at a minimum, the following:

A. Dates and times of engine operation**;** whether the operation was for maintenance and testing purposes or emergency use; and, thenature of the emergency, if known;

B. Hours of operation for all uses other than those specified above and identification of the nature of that use.

(Rule 69.4.1, 17 CCR §93115)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP16 The project owner shall maintain all records required by this permit including any calibration, maintenance, and other supporting information and copies of all reports required by this permit for at least five years shall be kept a minimum of 36 months from their date of creation unless otherwise indicated by the conditions of this permit. Such records shall be maintained onsite for a minimum of three years. [Rule 1421; Rule 69.4.1; 17 CCR 93115; 40 CFR 63 Subpart ZZZZ]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-FP17 The owner or operator shall submit a semiannual compliance report tothe District by the end of the month following each reporting period. Reporting periods are January 1 through June 30 and July 1 through December 31. The semiannual compliance report shall contain:

a. Company name and address,

b. Statement by a responsible official (with name, title, and signature) certifying the accuracy of the report content,

c. Date of report and dates of reporting period,

d. The number, duration, and a brief description for each type of

deviation which occurred during the reporting period and a description of actions taken to minimize emission and corrective actions taken,

e. If there are no deviations from requirements, a statement that therewere no deviations

f. If there are deviations during the reporting period, you must includethe following information:

1. Date and time that each malfunction started and stopped,

2. A summary of total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during the reporting period

(40CFR 63 Subpart ZZZZ §63.6650(b)(1))

Verification: The project owner shall submit the semiannual compliance reports to the CPM and to the District by the end of the month following each reporting period.

AQ-FP18 The Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

Verification: None required.

AQ-FP19 The project owner shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

Verification: The project owner shall certify compliance with this condition as part of the fourth quarter's Quarterly Operation Report (AQ-SC11) and shall makethe site and data available for inspection by representatives of the District, ARB, and the Energy Commission.

EXHIBIT C

PARCELS AND LANDOWNER INFORMATION WITHIN 1,000 FEET

Assessor's Parcel Numbers, Owners' Names and Addresses for all Parcels within 1,000 feet of Orange Grove Energy.

APN	Owner Name	Physical Address	Mailing Address
1100720600	San Diego Gas & Electric	Pala, California 92059	P.O. Box 129831 San Diego, CA 92112-9831
1100723400	San Luis Rey River Habitat Conservation Preserve LLC.	Pala Del Norte Road, Pala, California 92059	P.O. Box 357 Selah, WA 98942
1100722000	Patricia P. Truman (revocable living trust) and Breanne and David Taylor	10692 Pala Road, Pala CA 92059	10692 Highway 76, Pala CA
1100722800	San Diego Gas & Electric	Pala, California 92059	P.O. Box 129831 San Diego, CA 92112-9831
1100723000	San Diego Gas & Electric	Pala Road, Pala, California 92059	P.O. Box 129831 San Diego, CA 92112-9831
1100723100	Pala Band of Mission Indians	Pala Road, Pala, California 92059	35008 Pala Temecula Road, PMB 50 Pala, CA 92059
1100722200	Christian Zaleschuk	10693 Highway 76, Pala, California 92059	10693 Highway 76, Pala California 92059
1100721900	County of San Diego	10690 Highway 76 Pala, California 92059	1600 Pacific Highway, San Diego, CA 92101
1103700600	Pala Band of Mission Indians	Pala Road, Pala, California 92059	35008 Pala Temecula Road, PMB 50 Pala, CA 92059
1103700500	Pala Band of Mission Indians	Pala Road, Pala, California 92059	35008 Pala Temecula Road, PMB 50 Pala, CA 92059
1103700400	Pala Band of Mission Indians	10331 Pala Road, Pala, California 92059	35008 Pala Temecula Road, PMB 50 Pala, CA 92059
1103700300	Pala Band of Mission Indians	Pala Road, Pala, California 92059	35008 Pala Temecula Road, PMB 50 Pala, CA 92059
1103700100	San Diego Gas & Electric	Pala, California 92059	P.O. Box 129831 San Diego, CA 92112-9831
1101500200	San Diego Gas & Electric	Pala, California 92059	P.O. Box 129831 San Diego, CA 92112-9831

Source: Owner information was provided by the San Diego County Assessor. Note some of the properties do not have physical street addresses.