



AUG 23 2016

Matt Schmitt
Colony Energy Partners - Tulare, LLC
4940 Campus Dr, Ste C
Newport Beach, CA 92660

RE: Notice of Final Action - Authority to Construct
Facility Number: S-8153
Project Number: S-1161129

Dear Mr. Schmitt:

The Air Pollution Control Officer has issued the Authority to Construct permits to Colony Energy Partners - Tulare, LLC for the installation of two cogeneration (heat and electric) systems each equipped with 831 bhp MWM Model TCG 2016 V12 C lean burn natural gas-fired internal combustion (IC) engines each driving a 600 kW electrical generator served by two 41 MMBtu/hr Bekaert Model CEB 1200 digester gas-fired air-assisted ground level enclosed flares, at Paige Avenue (west of Enterprise Street) in Tulare, CA (S/2 Section 16, Township 20S, Range 24E Mount Diablo Base and Meridian). Enclosed are the Authority to Construct permits and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permits was published on July 5, 2016. The District's analysis of the proposal was also sent to CARB on June 30, 2016. No comments were received following the District's preliminary decision on this project.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 60 days.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

Mr. Matt Schmitt
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Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Errol Villegas at (559) 230-6000.

Sincerely,

A handwritten signature in black ink, appearing to read "Arnaud Marjollet", written over a horizontal line.

Arnaud Marjollet
Director of Permit Services

AM:gh

Enclosures

cc: Tung Le, CARB (w/enclosure) via email



Facility # S-8153
COLONY ENERGY PARTNERS-TULARE, LLC
4940 CAMPUS DRIVE, SUITE C
NEWPORT BEACH, CA 92660

AUTHORITY TO CONSTRUCT (ATC)

QUICK START GUIDE

1. **Pay Invoice:** Please pay enclosed invoice before due date.
2. **Fully Understand ATC:** Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
3. **Follow ATC:** You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.
4. **Notify District:** You must notify the District's Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District's Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.
5. **Source Test:** Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source_testing.htm for source testing resources.
6. **Maintain Records:** Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years.

By operating in compliance, you are doing your part to improve air quality for all Valley residents.

**For assistance, please contact District Compliance staff at
any of the telephone numbers listed below.**

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Tel: 661-392-5500 FAX: 661-392-5585



AUTHORITY TO CONSTRUCT

PERMIT NO: S-8153-1-2

ISSUANCE DATE: 08/16/2016

LEGAL OWNER OR OPERATOR: COLONY ENERGY PARTNERS-TULARE, LLC

MAILING ADDRESS: 4940 CAMPUS DRIVE, SUITE C
NEWPORT BEACH, CA 92660

LOCATION: PAIGE AVE (WEST OF ENTERPRISE STREET)
TULARE, CA

EQUIPMENT DESCRIPTION:

DIGESTER GAS PRODUCTION OPERATION CONSISTING OF ONE MANURE RECEPTION TANK, ONE DILUTION TANK, ONE FAT, OIL, GREASE, VEGETABLE WASTE RECEPTION TANK, ONE MIXING (FEED) TANK, TWO ANAEROBIC DIGESTER TANKS, ONE DIGESTATE (BUFFER) HOLDING TANK, DIGESTER GAS TREATMENT SYSTEM CONSISTING OF A CHILLER, COMPRESSOR, IRON SPONGE SCRUBBER, AND TWO 41 MMBTU/HR BEKAERT MODEL CEB 1200 DIGESTER GAS-FIRED AIR-ASSIST GROUND LEVEL ENCLOSED FLARES AND DIGESTATE MANAGEMENT SYSTEM CONSISTING OF ONE FILTER SCREW PRESS WITH ONE OVERFLOW BUFFER TANK, ONE SCREW PRESS BUFFER TANK, A POLYMER MAKE-DOWN SYSTEM, A DISSOLVED AIR FLOATATION (DAF) SYSTEM, ONE DIGESTATE BY-PRODUCT LOADOUT STATION, AND ONE BIOSOLIDS HEATING TANK AND TWO BIOMETHANE UPGRADING SYSTEMS EACH CONSISTING OF GAS COMPRESSORS, WATER SCRUBBING VESSEL, FLASH VESSEL, DRIER/PURIFIER VESSEL, AIR STRIPPING VESSEL SERVED BY A BIOFILTER, AND RECEIVING PIT SERVED BY A SECOND BIOFILTER


CONDITIONS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1/4 or 5% opacity. [District Rules 2201 and 4101]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. Only digester gas shall be combusted in the flares. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

for 
Arnaud Marjollet, Director of Permit Services

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6. The amount of digester gas combusted in each flare shall not exceed any of the following limits: 1.0 MMscf in any one day or 36.5 MMscf in any 12-month rolling period. [District Rule 2201]
7. The flare shall be equipped with an operational, non-resettable, totalizing mass or volumetric fuel flow meter or other District-approved alternative method to measure the amount of gas combusted in the flare. [District Rule 2201]
8. Emissions from each flare shall not exceed any of the following limits: 0.03 lb-NO_x/MMBtu; 0.008 lb-PM₁₀/MMBtu; 0.30 lb-CO/MMBtu; or 0.068 lb-VOC/MMBtu. [District Rule 2201]
9. Emissions from each flare, except during the commissioning period, shall not exceed 0.0112 lb-SO_x/MMBtu (based on 40 ppmv sulfur content in fuel (as H₂S) and four hour averaging period). [District Rule 2201]
10. Emissions from each flare, including the commissioning period, shall not exceed either of the following limits: 140.7 lb-SO_x/day or 8,528 lb-SO_x/year. [District Rule 2201]
11. The amount of digester gas sent through the biofilter serving the air stripper and solids dryer shall not exceed 1,840 scfm. [District Rule 4102]
12. The amount of digester gas sent through the biofilter serving the receiving pit shall not exceed 1,440 scfm. [District Rule 4102]
13. Emissions from the biofilter serving the air stripper shall not exceed 7 ppmv-H₂S. [District Rule 4102]
14. Emissions from the biofilter serving the receiving pit shall not exceed 2 ppmv-H₂S. [District Rule 4102]
15. Source testing to measure NO_x, CO and VOC emissions from the digester-fired flare shall be conducted within 120 days of initial start-up and at least once every twelve (12) months thereafter. [District Rule 2201]
16. Within 60 days of production of wet cake/pressed fiber, the VOC content of the material shall be determined using EPA Test Methods 413.2 and 418.1 and EPA Test Method 8260, and if necessary EPA Test Method 204 and 204D with either EPA Test Method 25A and 18 or SCAQMD Test Method 25.3, or an alternative method approved by the District. If VOC emissions are greater than two pounds per day (based on maximum throughput of the loaded out material), the permittee shall submit an Authority to Construct application for the wet cake/pressed fiber loadout operation within 15 days of the test results. [District Rule 2201]
17. During commissioning, the sulfur content of the digester gas combusted in each flare shall be monitored and recorded weekly. [District Rule 2201]
18. After commissioning, the sulfur content of the digester gas combusted in each flare shall be monitored and recorded monthly. After eight (8) consecutive monthly tests show compliance, the digester gas sulfur content monitoring frequency may be reduced to once every calendar quarter. If quarterly monitoring shows a violation of the digester gas sulfur content limit of this permit, then monthly monitoring shall resume and continue until eight consecutive months of monitoring show compliance with the gas sulfur content limit. Once compliance with the gas sulfur content limit is shown for eight consecutive months, then the monitoring frequency may return to quarterly. Monitoring of the sulfur content of the digester gas shall not be required if the flare does not operate during that period. Records of the results of monitoring of the digester gas sulfur content shall be maintained. [District Rule 2201]
19. After commissioning, the H₂S content of the digester gas at the outlet of the biofilter serving the air stripper shall be monitored and recorded monthly. After eight (8) consecutive monthly tests show compliance, the digester gas H₂S content monitoring frequency may be reduced to once every calendar quarter. If quarterly monitoring shows a violation of the digester gas H₂S content limit of this permit, then monthly monitoring shall resume and continue until eight consecutive months of monitoring show compliance with the gas H₂S content limit. Once compliance with the gas H₂S content limit is shown for eight consecutive months, then the monitoring frequency may return to quarterly. Monitoring of the H₂S content of the digester gas shall not be required if the air stripper does not operate during that period. Records of the results of monitoring of the digester gas H₂S content shall be maintained. [District Rule 4102]

20. Monitoring of the digester gas sulfur content shall be performed using a Testo 350 XL portable emission monitor; District-approved in-line H₂S monitors; gas detection tubes calibrated for H₂S; District-approved source test methods, including EPA Method 11 or EPA Method 15, ASTM Method D1072, D4084, and D5504; or an alternative method approved by the District. Prior to utilization of in-line monitors to demonstrate compliance with the digester gas sulfur content limit of this permit, the permittee shall submit details of the proposed monitoring system, including the make, model, and detection limits, to the District and obtain District approval for the proposed monitor(s). [District Rule 2201]
21. For source test purposes, NO_x emissions from the flare shall be determined using EPA Method 19 on a heat input basis, or EPA Method 3A, EPA Method 7E, or ARB Method 100 on a ppmv basis. [District Rule 2201]
22. For source test purposes, CO emissions from the flare shall be determined using EPA Method 10 or 10B, ARB Methods 1 through 5 with 10, or ARB Method 100. [District Rule 2201]
23. For source test purposes, VOC emissions from the flare shall be determined using EPA Method 25 or 25a. [District Rule 2201]
24. Stack gas oxygen (O₂) shall be determined using EPA Method 3A, EPA Method 7E, or ARB Method 100. [District Rule 2201]
25. Operator shall determine digester gas fuel higher heating value annually by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201]
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 1081]
28. The results of each source test shall be submitted to the District within 60 days of completion of the source test. [District Rule 1081]
29. Permittee shall maintain daily and monthly records of quantity of digester gas combusted in the flare, quantity of digester gas sent to each biofilter, and annual test results of higher heating value of digester gas. [District Rules 1070 and 2201]
30. The facility shall maintain records of annual throughput, material usage, or other information necessary to demonstrate that facility-wide emissions are less than ten tons per year for both NO_x and VOC. [District Rule 4311]
31. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-8153-4-1

ISSUANCE DATE: 08/16/2016

LEGAL OWNER OR OPERATOR: COLONY ENERGY PARTNERS-TULARE, LLC
MAILING ADDRESS: 4940 CAMPUS DRIVE, SUITE C
NEWPORT BEACH, CA 92660

LOCATION: PAIGE AVE (WEST OF ENTERPRISE STREET)
TULARE, CA

EQUIPMENT DESCRIPTION:

831 BHP MWM MODEL TCG 2016 V12 C LEAN BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER, INTERCOOLER, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND SELECTIVE CATALYTIC REDUCTION WITH UREA INJECTION COGENERATION SYSTEM

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702]
6. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
7. Air-to-fuel ratio controller(s) shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [District Rule 2201 and 40 CFR 60 Subpart JJJJ]
8. This engine shall be equipped with a nonresettable elapsed operating time meter and a non-resettable, totalizing mass or volumetric fuel flow meter or other APCO approved alternative. [District Rules 2201 and 4702 and 40 CFR 60 Subpart JJJJ]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

for 
Arnaud Marjollet, Director of Permit Services
S-8153-4-1 : Aug 16 2016 9:22AM - HEINENG : Joint Inspection NOT Required

9. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
10. Emissions from the IC engine when fired on natural gas shall not exceed any of the following limits: 5 ppmv @ 15% O₂ or 0.07g-NO_x/bhp-hr, 0.0094 g-SO_x/bhp-hr (based on 1.0 grain-S/100 scf fuel), 0.033 g-PM₁₀/bhp-hr, 82.4 ppmv @ 15% O₂ or 0.60 g-CO/bhp-hr, or 36.1 ppmv @ 15% O₂ or 0.15 g-VOC/bhp-hr. [District Rules 2201 and 4702, and 40 CFR 60 Subpart JJJJ]
11. The ammonia (NH₃) emission concentration shall not exceed 5 ppmvd @ 15% O₂. [District Rules 2201 and 4102]
12. Source testing to measure natural gas fuel combustion NO_x, CO, VOC and ammonia emissions from this unit shall be conducted within 60 days of initial start-up and once every 8,760 hours of operation or 24 months, whichever comes first, thereafter. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
13. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702]
14. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081]
15. The permittee shall monitor and record the stack concentration of NO_x, CO, O₂, and NH₃ at least once every month (in which a source test is not performed). NO_x, CO, and O₂ concentrations shall be performed using a portable emission monitor that meets District specifications. NH₃ monitoring shall be conducted utilizing District approved gas-detection tubes or a District approved equivalent method. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2201 and 4702]
16. If the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, or the NH₃ concentrations corrected to 15% O₂, as measured by District approved gas-detection tubes, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2201 and 4702]
17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
18. The permittee shall maintain records of: (1) the date and time of NO_x, CO, O₂, and NH₃ measurements, (2) the O₂ concentration in percent and the measured NO_x, CO, and NH₃ concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 2201 and 4702]
19. The permittee shall submit an analysis showing the natural gas fuel sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rules 2201 and 4702]

CONDITIONS CONTINUE ON NEXT PAGE

20. For initial emissions source testing, the arithmetic average of three 60-consecutive-minute test runs shall apply. Each test run shall be conducted within 10 percent of 100 percent peak (or the highest achievable) load. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
23. The results of each source test shall be submitted to the District and EPA within 60 days after completion of the source test. [District Rule 1081 and 40 CFR 60 Subpart JJJJ]
24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
25. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
26. Notification of the date construction of this engine commenced shall be submitted to the District and EPA and shall be postmarked no later than 30 days after such date as construction commenced. The notification shall contain the following information: 1) Name and address of the owner or operator; 2) The address of the affected source; 3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; 4) Emission control equipment; and 5) Fuel used. [40 CFR 60 Subpart JJJJ]
27. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-8153-5-1

ISSUANCE DATE: 08/16/2016

LEGAL OWNER OR OPERATOR: COLONY ENERGY PARTNERS-TULARE, LLC
MAILING ADDRESS: 4940 CAMPUS DRIVE, SUITE C
NEWPORT BEACH, CA 92660

LOCATION: PAIGE AVE (WEST OF ENTERPRISE STREET)
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EQUIPMENT DESCRIPTION:

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CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702]
6. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
7. Air-to-fuel ratio controller(s) shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [District Rule 2201 and 40 CFR 60 Subpart JJJJ]
8. This engine shall be equipped with a nonresettable elapsed operating time meter and a non-resettable, totalizing mass or volumetric fuel flow meter or other APCO approved alternative. [District Rules 2201 and 4702 and 40 CFR 60 Subpart JJJJ]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

for 
Arnaud Marjollet, Director of Permit Services
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9. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
10. Emissions from the IC engine when fired on natural gas shall not exceed any of the following limits: 5 ppmv @ 15% O₂ or 0.07 g-NO_x/bhp-hr, 0.0094 g-SO_x/bhp-hr, 0.033 g-PM₁₀/bhp-hr, 82.4 ppmv @ 15% O₂ or 0.60 g-CO/bhp-hr, or 25 ppmv @ 15% O₂ or 0.15 g-VOC/bhp-hr. [District Rules 2201 and 4702, and 40 CFR 60 Subpart JJJJ]
11. The ammonia (NH₃) emission concentration shall not exceed 5 ppmvd @ 15% O₂. [District Rules 2201 and 4102]
12. Source testing to measure natural gas fuel combustion NO_x, CO, VOC and ammonia emissions from this unit shall be conducted within 60 days of initial start-up and once every 8,760 hours of operation or 24 months, whichever comes first, thereafter. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
13. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702]
14. Source testing for ammonia slip shall be conducted utilizing BAAQMD method ST-1B. [District Rule 1081]
15. The permittee shall monitor and record the stack concentration of NO_x, CO, O₂, and NH₃ at least once every month (in which a source test is not performed). NO_x, CO, and O₂ concentrations shall be performed using a portable emission monitor that meets District specifications. NH₃ monitoring shall be conducted utilizing District approved gas-detection tubes or a District approved equivalent method. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2201 and 4702]
16. If the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, or the NH₃ concentrations corrected to 15% O₂, as measured by District approved gas-detection tubes, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2201 and 4702]
17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
18. The permittee shall maintain records of: (1) the date and time of NO_x, CO, O₂, and NH₃ measurements, (2) the O₂ concentration in percent and the measured NO_x, CO, and NH₃ concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 2201 and 4702]
19. The permittee shall submit an analysis showing the natural gas fuel sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rules 2201 and 4702]

CONDITIONS CONTINUE ON NEXT PAGE

20. For initial emissions source testing, the arithmetic average of three 60-consecutive-minute test runs shall apply. Each test run shall be conducted within 10 percent of 100 percent peak (or the highest achievable) load. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
23. The results of each source test shall be submitted to the District and EPA within 60 days after completion of the source test. [District Rule 1081 and 40 CFR 60 Subpart JJJJ]
24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
25. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702 and 40 CFR 60 Subpart JJJJ]
26. Notification of the date construction of this engine commenced shall be submitted to the District and EPA and shall be postmarked no later than 30 days after such date as construction commenced. The notification shall contain the following information: 1) Name and address of the owner or operator; 2) The address of the affected source; 3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; 4) Emission control equipment; and 5) Fuel used. [40 CFR 60 Subpart JJJJ]
27. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702]