

DOCKETED

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Project Title:	Sonoran Energy Project (formerly Blythe Energy Project Phase II) - Compliance
TN #:	211256
Document Title:	Letter to Mary Dyas and Submittal of MDAQMD's Authorities to Construct for the Sonoran Energy Project
Description:	Letter to Mary Dyas and Submittal of MDAQMD's Authorities to Construct for the Sonoran Energy Project
Filer:	Kimberly Hellwig
Organization:	Sierra Research
Submitter Role:	Applicant
Submission Date:	4/26/2016 9:46:12 AM
Docketed Date:	4/26/2016



**sierra
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A Trinity Consultants Company

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April 26, 2016

Mary Dyas, Compliance Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Re: Sonoran Energy Project (02-AFC-1C)
Mojave Desert Air Quality Management District's Authorities to Construct for the
Sonoran Energy Project (Issued April 14, 2016)


Dear Ms. Dyas:

On behalf of AltaGas Sonoran Energy Inc., please find enclosed herewith the Authorities to Construct (ATC) issued by the Mojave Desert Air Quality Management District for the Sonoran Energy Project (Facility Id. #2472). Each of the ATCs listed below was issued on April 14, 2016.

- B008877: Combustion Turbine Generator Power Block
- B008879: HRSG Duct Burner
- C011893: Oxidation Catalyst
- C008881: Selective Catalytic Reduction System
- B011901: Auxiliary Boiler
- E008885: Diesel IC Engine and Fire Pump
- B008884: Cooling Tower

Should you have any questions regarding these ATCs, please do not hesitate to contact me at (916) 273-5126.

Sincerely,


Gary Rubenstein

Enclosure



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B008877

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: JANUARY 2017

OWNER OR OPERATOR (Co. #1437)

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Port Huron, MI 48060

EQUIPMENT LOCATION (Fac. #2472)

Sonoran Energy Project
15560 West Hobsonway
Blythe, CA 92225

Description:

COMBUSTION TURBINE GENERATOR POWER BLOCK consisting of: Natural gas fueled GE 7HA.02 combustion turbine generator power block with a connected heat recovery steam generator and a steam condensing turbine, maximum turbine heat input of 3320 MMBtu/hr.

EQUIPMENT

Capacity	Equipment Description
3320	Turbine

CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below. [District Rule 204]
2. This equipment shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 0.5 grains per 100 dscf on a twenty-four hour basis and not exceeding 0.25 grains per 100 dscf on a rolling twelve month average basis, and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

Fee Schedule: 2 (f)

Rating: 3320000000 Btu

SIC: 4911

SCC: 20100201

Location/UTM(Km):
715E/3725N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Attn: Corporate Secretary
Port Huron, MI 48060

By:
Eldon Heaston
Air Pollution Control Officer

3. This equipment is subject to the federal NSPS codified at 40 CFR Part 60, Subparts A (General Provisions) and KKKK(Standards of Performance for Stationary Combustion Turbines) and TTTT (Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units). This equipment is also subject to 40 CFR Part 98 - Mandatory Greenhouse Gas Reporting, Federal Acid Rain (Title IV) and Federal Operating Permit (Title V) programs. Compliance with all applicable provisions of these regulations is required. In the event of a conflict between these conditions, State and Federal regulations, the more stringent requirements shall govern.

4. Emissions from this equipment (including its associated duct burner) shall not exceed the following emission limits at any firing rate, except for CO, NO_x and VOC during periods of startup, shutdown and malfunction and during the commissioning period as defined in this permit:

a. Hourly rates, computed every 15 minutes, verified by CEMS and annual compliance tests:

i. NO_x as NO₂ - 26.0 lb/hr (based on 2.0 ppmvd corrected to 15% O₂ and averaged over one hour)

ii. CO - 16.2 lb/hr (based on 2.0 corrected to 15% O₂ and averaged over 1 hour)

iii. NH₃ - 5 ppmvd (corrected to 15% O₂ and averaged over 1 hour)

b. Hourly rates, verified by annual compliance tests or other compliance methods in the case of SO_x:

i. VOC as CH₄ - 9.3 lb/hr (based on 2.0 ppmvd with duct firing corrected to 15% O₂ and averaged over 1 hours)

ii. VOC as CH₄ - 4.6 lb/hr (based on 1.0 ppmvd without duct firing corrected to 15% O₂ and averaged over 3 hours)

iii. SO_x as SO₂ - 4.9 lb/hr (based on 0.5 grains/100 dscf fuel sulfur)

iv. PM₁₀ - 10.0 lb/hr

[Rule 1303]

[40 CFR 60 Subpart KKKK]

5. A CEMS shall be installed and operated to demonstrate compliance with the NO_x emissions limit specified in 40 CFR 60 Subpart KKKK. A quality assurance plan shall be developed and kept on site and available pursuant to 60.4335.

6. Emissions of CO and NO_x from this equipment, including the duct burner, may exceed the limits contained in Condition 4 during startup and shutdown periods as follows:

a. Startup shall be defined as the period beginning with ignition and lasting until the power block has reached operating permit limits. Cold startup means a startup when the power block has not been in operation during the preceding 72 hours. Hot startup means a startup when the power block has been in operation during the preceding 8 hours. Warm startup means a startup that is not a hot or cold startup. Shutdown shall be defined as the period beginning with the lowering of the power block from normal operating load and lasting until fuel flow is completely off and combustion has ceased.

b. During a cold startup emissions shall not exceed the following, verified by CEMS:

i. NO_x - 187.5 lb

ii. CO - 136.0 lb

c. During a warm startup emissions shall not exceed the following, verified by CEMS:

i. NO_x - 154.7 lb

ii. CO - 135.3 lb

d. During a hot startup emissions shall not exceed the following, verified by CEMS:

i. NO_x - 113.9 lb

ii. CO - 133.3 lb

e. During a shutdown emissions shall not exceed the following, verified by CEMS:

i. NOx - 24.8 lb

ii. CO - 148.11 lb

7. Emissions from this equipment, including the duct burner, shall not exceed the following emission limits, based on a calendar day summary:

a. NOx - 880.0 lb/day, verified by CEMS

b. CO - 887.4 lb/day, verified by CEMS

c. VOC as CH4 - 281.1 lb/day, verified by compliance tests and hours of operation d. SOx as SO2 - 117.6 lb/day, verified by fuel sulfur content and fuel use data

e. PM10 - 238.2 lb/day, verified by compliance tests and hours of operation

8. Particulate emissions from this equipment shall not exceed an opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water vapor.

[Rule 401]

9. This equipment shall exhaust through a stack at a minimum height of 140 feet.

[Rule 1302(C)]

10. Except during the commissioning as defined, the owner/operator (o/o) shall not operate this equipment without the selective catalytic NOx reduction system with valid District permit C008881 installed and fully functional.

[District Rule 1303(A) -BACT]

11. Emissions of NOx, CO, CO2, O2 and ammonia slip shall be monitored using a Continuous Emissions Monitoring System (CEMS). Turbine fuel consumption shall be monitored using a continuous monitoring system. Stack gas flow rate shall be monitored using a Continuous Emission Rate Monitoring System (CERMS). The operator shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan and MDAQMD Rule 218, and they shall be installed prior to initial equipment startup. The continuous emissions monitor(s) shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CEMS passes the accuracy requirement for startups and shutdowns specified in Condition 15. If accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits in this permit. Six (6) months prior to installation the operator shall submit a monitoring plan for District review and approval.

[40 CFR 98]

12. The o/o shall conduct all required compliance/certification tests in accordance with a District-approved test plan. Thirty (30) days prior to the compliance/certification tests the operator shall provide a written test plan for District review and approval. Written notice of the compliance/certification test shall be provided to the District ten (10) days prior to the tests so that an observer may be present. A written report with the results of such compliance/certification tests shall be submitted to the District within forty-five (45) days after testing.

13. The o/o shall perform the following annual compliance tests in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. Alternative test methods may be used with the prior approval of the District. The following compliance tests are required:

- a. NOx as NO2 in ppmvd at 15% O2 and lb/hr (measured per USEPA Reference Methods 19 and 20).
- b. VOC as CH4 in ppmvd at 15% O2 and lb/hr (measured per USEPA Reference Methods 25A and 18).
- c. SOx as SO2 in ppmvd at 15% O2 and lb/hr.
- d. CO in ppmvd at 15% O2 and lb/hr (measured per USEPA Reference Method 10).
- e. PM10 in mg/m3 at 15% O2 and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5).
- f. Flue gas flow rate in scfmd.
- g. Opacity (measured per USEPA reference Method 9).
- h. Ammonia slip in ppmvd at 15% O2.

[40 CFR 60 Subpart KKKK 60.4400]

14. The o/o shall, at least as often as once every five years (commencing with the initial compliance test), include the following supplemental source tests in the annual compliance testing:

- a. Quantification of all startup VOC emissions - pursuant to a written District approved protocol and testing schedule
- b. Quantification of shutdown VOC emissions.

15. Continuous monitoring systems shall meet the following acceptability testing requirements from 40 CFR 60 Appendix B:

- a. For NOx, Performance Specification 2.
- b. For O2, Performance Specification 3.
- c. For CO, Performance Specification 4.
- d. For stack gas flow rate, Performance Specification 6.
- e. For ammonia, a District approved procedure that is to be submitted by the o/o.

16. The o/o shall submit to the APCO and USEPA Region IX the following information for the preceding calendar quarter by January 30, April 30, July 30 and October 30 of each year this permit is in effect. Each January 30 submittal shall include a summary of the reported information for the previous year. This information shall be maintained on site for a minimum of five (5)

years and shall be provided to District personnel on request:

- a. Operating parameters of emission control equipment, including but not limited to ammonia injection rate, NO_x emission rate and ammonia slip.
- b. Total plant operation time (hours), number of startups, hours in cold startup, hours in warm startup, hours in hot startup, and hours in shutdown.
- c. Date and time of the beginning and end of each startup and shutdown period.
- d. Average plant operation schedule (hours per day, days per week, weeks per year).
- e. Monthly fuel use in MMScf
- e. All continuous emissions data reduced and reported in accordance with the District-approved CEMS protocol.
- f. Maximum hourly, maximum daily, total quarterly, and total 12 month rolling average emissions of NO_x, CO, PM₁₀, VOC and SO_x (including calculation protocol).
- g. Fuel sulfur content (monthly laboratory analyses, monthly natural gas sulfur content reports from the natural gas supplier(s), or the results of a custom fuel monitoring schedule approved by USEPA for compliance with the fuel monitoring provisions of 40 CFR 60 Subpart KKKK)
- h. A log of all excess emissions, including the information regarding malfunctions/breakdowns required by Rule 430.
- i. Any permanent changes made in the plant process or production which would affect air pollutant emissions, and indicate when changes were made.
- j. Any maintenance to any air pollutant control system (recorded on an as-performed basis).
- k. Written results of annual performance tests performed [60.4375]

17. The o/o must surrender to the District sufficient valid Emission Reduction Credits for this equipment before the start of construction of any part of the project for which this equipment is intended to be used. In accordance with Regulation XIII the operator shall obtain 85.6 tons of NO_x and 23.3 tons of VOC offsets. NO_x ERCs may be used to meet the VOC offset obligation at a ratio of 1:1.

[Rule 1303]

[Rule 1305]

18. During an initial commissioning period not to exceed 1,250 hours and a maximum of 180 days, commencing with the first firing of fuel in this equipment, NO_x, CO, VOC and NH₃ concentration limits shall not apply.

19. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning, and calibration activities recommended by the equipment manufacturers and the construction contractor to ensure safe and reliable steady state operation of the gas turbine and associated electrical delivery systems.

20. The commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when a gas turbine is first fired, whichever occurs first. The commissioning period shall terminate when the plant has completed initial source testing, completed final plant tuning, and is available for commercial operation. Within 15 days of the conclusion of the commissioning period, the facility shall notify the District in writing of the date that the commissioning period ended and the actual number of hours that comprised the commissioning period.

21. During the commissioning period, the emission rates from the gas turbine system shall not exceed any of the following limits:

- a. NOx (as NO₂) - 550 lb/hr and 13,750 lb/day;
- b. VOC (as CH₄) - 464 lb/hr and 2620 lb/day;
- c. CO - 4,919 lb/hr and 28,500 lb/day;
- d. PM₁₀ - 8 lb/hr and 211 lb/day; or
- e. SOx (as SO₂) - 4.9 lb/hr and 118 lb/day

22. During the commissioning period, NOx and CO emissions rate shall be monitored using installed and calibrated CEMS.

23. The o/o shall provide stack sampling ports and platforms necessary to perform source tests required to verify compliance with District rules, regulations and permit conditions. The location of these ports and platforms shall be subject to District approval.

24. Within 60 days after achieving the maximum firing rate at which the facility will be operated, but not later than 180 days after initial startup, the operator shall perform an initial compliance test. This test shall demonstrate that this equipment is capable of operation at 100% load in compliance with the emission limits in Condition 4.

25. The initial compliance test shall include tests for the following.

- a. Formaldehyde
- b. Certification of CEMS and CERMS at 100% load

26. Initial compliance testing to measure startup and shutdown VOC mass emission rates shall be conducted before the end of the commissioning period and at least once every five years thereafter. The initial compliance tests shall include tests for the following:

- a. Quantification of all startup VOC emissions - pursuant to a written District approved protocol and testing schedule
- b. Quantification of shutdown VOC emissions.

CEMS accuracy for NOx and CO shall be determined during startup and shutdown source testing in accordance with a test protocol approved by the District. If the CEM data is not able to accurately determine compliance with NOx and CO startup emission limits, then startup and shutdown NOx and CO testing shall be conducted every 12 months. If an annual startup and shutdown NOx and CO source test demonstrates that the CEM data is accurate, the startup and shutdown NOx and CO testing frequency shall return to the once every five years schedule.

27. This equipment is subject to 40 CFR 60 Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units. Carbon dioxide emissions from this turbine shall not exceed 1,000 lb CO₂/MWh (gross) or 1,030 lb CO₂/MWh (net). [40 CFR 60 Subpart TTTT 60.5520]

28. Emissions from all permitted equipment at the Sonoran Energy Project, shall not exceed the following emission limits, based on a rolling 12 month summary:

- a. NO_x - 85.6 tons/year, verified by CEMS data, compliance testing and District approved methodology
- b. CO - 78 tons/year, verified by CEMS data, compliance testing and District approved methodology
- c. VOC as CH₄ - 24.3 tons/year, verified by compliance tests and hours of operation in steady-state, pre-mix mode
- d. SO_x as SO₂ - 12 tons/year, verified by fuel sulfur content and fuel use data
- e. PM₁₀ - 40.1 tons/year, verified by compliance tests and hours of operation

These limits shall apply to all emissions from all Sonoran Energy Project permit units at this facility (as listed in Part I.A.1, of the Federal Operating Permit), and shall include emissions during all modes of operation, including startup, shutdown and malfunction.

29. Pursuant to Regulation XIII the Blythe Energy Project and Sonoran Energy Project are one stationary source. Emissions from all permit units at the Blythe Energy Project and Sonoran Energy Project facilities, shall not exceed the following emission limits, based on a rolling 12 month summary:

- a. NO_x - 182.6 tons/year, verified by CEMS data, compliance testing and District approved methodology
- b. CO - 175 tons/year, verified by CEMS data, compliance testing and District approved methodology
- c. VOC as CH₄ - 48.3 tons/year, verified by compliance tests and hours of operation in steady-state, pre-mix mode
- d. SO_x as SO₂ - 20.8 tons/year, verified by fuel sulfur content and fuel use data
- e. PM₁₀ - 97 tons/year, verified by compliance tests and hours of operation

These limits shall apply to all emissions from all Blythe Energy Project and Sonoran Energy Project permit units at this facility, and shall include emissions during all modes of operation, including startup, shutdown and malfunction.

30. Total fuel use in the gas turbine and associated duct burner shall not exceed 23,984 MMscf in any rolling 12-month period.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B008879

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: JANUARY 2017

OWNER OR OPERATOR (Co. #1437)

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Port Huron, MI 48060

EQUIPMENT LOCATION (Fac. #2472)

Sonoran Energy Project
15560 West Hobsonway
Blythe, CA 92225

Description:

HRSG DUCT BURNER consisting of: Natural gas burner located within the heat recovery steam generator covered by B008877, maximum heat output of 221.6 MMBtu/hr. Manufacturer, model and serial numbers will be specified when available.

CONDITIONS:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below. [District Rule 204]
2. This equipment shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 0.5 grains per 100 dscf on a twenty-four hour basis and not exceeding 0.25 grains per 100 dscf on a rolling twelve month average basis, and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
[District Rule 1303(B); District Rule 431; District Rule 204]
3. This duct burner shall not be operated unless the combustion turbine generator with valid District permit B008877, selective catalytic reduction system with valid District permit C008881, and oxidation catalyst with valid District permit C011893, are in operation.

[District Rule 1303(A); 40 CFR part 60 subpart KKKK: emissions from the duct burner are to be included in emission limit for

Fee Schedule: 2 (f)	Rating: 221600000 Btu	SIC: 4911	SCC: 20100201	Location/UTM(Km): 715E/3725N
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This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Attn: Corporate Secretary
Port Huron, MI 48060

By:
Eldon Heaston
Air Pollution Control Officer

turbine]

4. Fuel use by this equipment shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District personnel on request. [District Rule 1303(A)]



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
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AUTHORITY TO CONSTRUCT

C011893

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: JANUARY 2017

OWNER OR OPERATOR (Co. #1437)

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Port Huron, MI 48060

EQUIPMENT LOCATION (Fac. #2472)

Sonoran Energy Project
15560 West Hobsonway
Blythe, CA 92225

Description:

OXIDATION CATALYST consisting of: Manufacturer, model and serial numbers will be specified when available.

CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below. [District Rule 204]
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles. [District Rule 204]
3. This equipment shall be operated concurrently with the combustion turbine generator with valid District permit B008877. [BACT requirement to B008877]

Fee Schedule: 7 (h)

Rating: 1 device

SIC: 4911

SCC: 20100201

Location/UTM(Km):
715E/3725N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

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AUTHORITY TO CONSTRUCT

C008881

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: JANUARY 2017

OWNER OR OPERATOR (Co. #1437)

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Port Huron, MI 48060

EQUIPMENT LOCATION (Fac. #2472)

Sonoran Energy Project
15560 West Hobsonway
Blythe, CA 92225

Description:

SELECTIVE CATALYTIC REDUCTION SYSTEM consisting of: Selective catalytic reduction system with a catalyst located within the power train covered by B008877, and an ammonia injection system. Manufacturer, model and serial numbers will be specified when available.

CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below. [District Rule 204]
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles. [District Rule 204]
3. This equipment shall be operated concurrently with the combustion turbine generator with valid District permit B008877. [District Rule 1302; District Rule 1303(A)]
4. Ammonia shall be injected whenever the selective catalytic reduction system has reached or exceeded 550 deg Fahrenheit. Except during periods of startup and shutdown, ammonia slip shall not exceed 5 ppmvd (corrected to 15% oxygen), averaged over three hours verified by GEMS. [District Rule 1302; District Rule 1303(A)]

Fee Schedule: 7 (h)

Rating: 1 device

SIC: 4911

SCC: 20100201

Location/UTM(Km):
715E/3725N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
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Port Huron, MI 48060

By:
Eldon Heaston
Air Pollution Control Officer

5. The owner/operator shall record and maintain for this equipment the following on site for a minimum of five (5) years and shall provide to District personnel upon request.

a. Ammonia injection, in pounds per hour

b. Temperature, in degrees Fahrenheit

[District Rule 1302; District Rule 1303(A)]



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

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760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B011901

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

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OWNER OR OPERATOR (Co. #1437)

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Port Huron, MI 48060

EQUIPMENT LOCATION (Fac. #2472)

Sonoran Energy Project
15560 West Hobsonway
Blythe, CA 92225

Description:

AUXILIARY BOILER, consisting of: Manufacture, Boiler Type, Model No. and Serial No details to be specified when available. Unit is rated at a maximum 66.3 MMBtu/hr (heat input).

CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below. [District Rule 204]
2. This equipment shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 0.5 grains per 100 dscf on a twenty-four hour basis and not exceeding 0.25 grains per 100 dscf on a rolling twelve month average basis, and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles. [District Rule 1303(B); District Rule 431; District Rule 204]
3. This equipment is subject to the Federal NSPS codified at 40 CFR Part 60, Subparts A (General Provisions) and Dc (Small Industrial-Commercial-Institutional Steam Generating Units). Pursuant to 40 CFR 60.48c, the owner/operator must maintain records of the quantity of fuel(s) delivered to this property during each calendar month. Records must be kept for a minimum of five years. [40 CFR part 60 subpart Dc]
4. This equipment shall not be operated for more than 7000 total hours including startup/shutdown events per rolling twelve month period. Startup/shutdown events shall not exceed 400 hours per rolling twelve month period.

Fee Schedule: 2 (e)

Rating: 66300000 Btu

SIC: 4911

SCC: 10100602

Location/UTM(Km):
715E/3725N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

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By:
Eldon Heaston
Air Pollution Control Officer

[District Rule 1303(B) - Emission Offsets driven requirement]

5. Except during start up/shut down events and the initial boiler tuning period, emissions from this equipment shall not exceed the following hourly emission limits, verified by fuel use and annual compliance tests (initial compliance test with respect to VOC, SOx, and PM10):

- a. NOx as NO₂ - 0.56 lb/hr (based on 7.0 ppmvd corrected to 3% O₂ and averaged over one hour)
- b. CO - 2.43 lb/hr (based on 50 ppmvd corrected to 3% O₂ and averaged over one hour)
- c. VOC as CH₄ - 0.28 lb/hr (based on 10.0 ppmvd corrected to 3% O₂ and averaged over one hour)
- d. SOx as SO₂ - 0.09 lb/hr (based on 0.5 grains/100 dscf fuel sulfur)
- e. PM10 - 0.46 lb/hr (front and back half)

[District Rule 1303(A); District Rule 1158 - Not applicable applies only in FONNA]

6. During startup/shutdown events, emissions from this equipment shall not exceed the following emission rates verified by fuel use and annual compliance tests:

- a. NOx as NO₂ - 1.99 lb/hr (based on 25.0 ppmvd corrected to 3% O₂ and averaged over one hour)
- b. CO - 12.13 lb/hr (based on 250 ppmvd corrected to 3% O₂ and averaged over one hour)
- c. VOC as CH₄ - 0.69 lb/hr (based on 25.0 ppmvd corrected to 3% O₂ and averaged over one hour)
- d. SOx as SO₂ - 0.09 lb/hr (based on 0.5 grains/100 dscf fuel sulfur)
- e. PM10 - 0.46 lb/hr (front and back half)

7. During initial boiler tuning period, emissions from this equipment shall not exceed the following emission rates verified by fuel use and annual compliance tests:

- a. NOx as NO₂ - 7.97 lb/hr (based on 100.0 ppmvd corrected to 3% O₂ and averaged over one hour)
- b. CO - 12.13 lb/hr (based on 250 ppmvd corrected to 3% O₂ and averaged over one hour)
- c. VOC as CH₄ - 0.69 lb/hr (based on 25.0 ppmvd corrected to 3% O₂ and averaged over one hour)
- d. SOx as SO₂ - 0.09 lb/hr (based on 0.5 grains/100 dscf fuel sulfur)
- e. PM10 - 0.46 lb/hr (front and back half)

8. During the initial boiler tuning period, the owner or operator shall keep records of the natural gas fuel combusted in the boiler on daily basis.

9. The o/o shall maintain an operations log for this equipment on-site and current for a minimum of five (5) years, and said log shall be provided to District personnel on request. The operations log shall include the following information at a minimum:

- a. Total operation time (hours per month, by month);
- b. Number of startups and shutdowns on a daily, monthly and rolling 12 month basis;
- c. Maximum hourly, maximum daily, monthly and rolling 12 month fuel use;
- d. Maximum hourly, maximum daily, monthly, and rolling 12 month emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); and,
- e. Any permanent changes made to the equipment that would affect air pollutant emissions, and indicate when changes were made.

[District Rule 1302(C)(2)(a)]

10. The o/o shall perform the following annual compliance tests on this equipment in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. Alternative test methods may be used with the prior approval of the District. The following compliance tests are required:

- a. NOx as NO2 in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20).
- b. CO in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Method 10).

11. This boiler must be tuned up annually according to the procedures specified in 40 CFR 63.7540(a)(10).



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E008885

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: JANUARY 2017

OWNER OR OPERATOR (Co. #1437)

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Port Huron, MI 48060

EQUIPMENT LOCATION (Fac. #2472)

Sonoran Energy Project
15560 West Hobsonway
Blythe, CA 92225

Description:

DIESEL IC ENGINE, FIRE PUMP consisting of: Year of Mfg TBD. NFPA engine nameplate horsepower 238. US EPA Tier 3, USEPA Family Name TBD.

One John Deere/Clarke, Diesel fired internal combustion engine Model No. TBD and Serial No. TBD, Direct Injected, Turbo Charged, producing 303 bhp with 6 cylinders at 1800 rpm while consuming a maximum of 20 gal/hr. This equipment powers a Clarke Fire Pump Model No. TBD and Serial No. TBD, rated at TBD.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.84	gm/bhp-hr
NOx	2.61	gm/bhp-hr
PM10	0.1	gm/bhp-hr
SOx	0.01	gm/bhp-hr
VOC	0.1	gm/bhp-hr

CONDITIONS:

1. This certified stationary compression-ignited internal combustion engine shall be installed, operated and maintained in strict accordance with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of air contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all

Fee Schedule: 7 (g)

Rating: 1 device

SIC: 4911

SCC: 20100102

Location/UTM(Km):
715E/3725N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Attn: Corporate Secretary
Port Huron, MI 48060

By:
Eldon Heaston
Air Pollution Control Officer

data and specifications submitted with the application for this permit. [40 CFR 60.4211(a)]

2. This equipment shall only be fired on diesel fuel that meets the following requirements, or an alternative fuel approved by the ATCM for Stationary CI Engines:

- a. Ultra-low sulfur concentration of 0.0015% (15 ppm) or less, on a weight per weight basis; and, a cetane index or aromatic content, as follows:
- b. A minimum cetane index of 40; or,
- c. A maximum aromatic content of 35 volume percent.

Note: Use of CARB certified ULSD fuel satisfies the requirements of subparagraph 3.b above. [17 CCR 93115.5(a) and 40 CFR 60.4207(b)]

3. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time. [17 CCR 93115.10(d)]

4. This engine shall be limited to use for emergency power, defined as in response to a fire or flood. In addition, this engine shall be operated no more than 50 hours per year for testing and maintenance, unless NFPA 25 (current edition) authorizes additional time: If the 50 hour limit is exceeded, the o/o is to have the authorizing section of NFA 25 available for review at all times. [17 CCR 93115.6(a)(4)(1)(c)]; 40 CFR 60.4211(f); 40 CFR 60.4219]

5. The o/o shall maintain a operations log for this unit current and on-site, either at the engine location or at an on-site location, for a minimum of five (5) years, and be made available to the District staff within 5 working days from the District's request, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours) [40 CFR 60.4214];
- b. Reason for use (testing & maintenance, emergency, required emission testing) [40 CFR 60.4214];
- c. Calendar year operation in terms of fuel consumption (in gallons) and total hours [District and State Only]; and,
- d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log) [40 CFR 60.4207].

6. This equipment shall exhaust through a stack at a minimum height of 10 feet. [District Rule 1302; Demonstration of compliance with AAQS]

7. This engine is subject to the requirements of Title 17 CCR 93115, the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines and 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (NSPS). In the event of a conflict between these conditions and the ATCM or NSPS, the more stringent requirements shall govern. [District Rule 1302]

8. The facility must submit accurate emissions inventory data to the District, in a format approved by the District, upon District request. [District Rule 204]



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B008884

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: JANUARY 2017

OWNER OR OPERATOR (Co. #1437)

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Port Huron, MI 48060

EQUIPMENT LOCATION (Fac. #2472)

Sonoran Energy Project
15560 West Hobsonway
Blythe, CA 92225

Description:

COOLING TOWER consisting of: Water circulation, treatment and handling equipment, and air circulation equipment. Manufacturer, model and serial numbers will be specified when known.

EQUIPMENT

Capacity	Equipment Description
2500	Ten 250 hp Cooling Cell Fans
4000	Four 1000 hp Water Circulation Pumps

CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below. [District Rule 204]
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles. [District Rule 204]
3. The drift rate shall not exceed 0.0005 percent with a maximum circulation rate of 129,480 gallons per minute (gpm). The maximum hourly PM10 emission rate shall not exceed 1.62 pounds per hour, as calculated per a written District-approved protocol.

Fee Schedule: 1 (d)

Rating: 6750 bhp

SIC: 4911

SCC: 38500120

Location/UTM(Km):
715E/3725N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

AltaGas Sonoran Energy Inc.
1411 Third Street, Suite A
Attn: Corporate Secretary
Port Huron, MI 48060

By:
Eldon Heaston
Air Pollution Control Officer

4. No hexavalent chromium containing compounds shall be added to cooling tower circulating water.

5. The operator shall perform weekly tests of the blow-down water quality. The operator shall maintain a log which contains the date and result of each blow-down water quality test, and the resulting mass emission rate. This log shall be maintained on site for a minimum of five (5) years and shall be provided to District personnel on request. [District Rule 1303(A)]

6. The operator shall conduct all required cooling tower water quality tests in accordance with a District-approved test and emissions calculation protocol. Thirty (30) days prior to the first such test the operator shall provide a written test and emissions calculation protocol for District review and approval.

7. A maintenance procedure shall be established that states how often and what procedures will be used to ensure the integrity of the drift eliminators. This procedure is to be kept on-site and available to District personnel on request. [District Rule 1303(A)]



Mojave Desert Air Quality Management District
 14306 Park Avenue, Victorville, CA 92392-2310
 760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

INVOICE

04/14/2016

Invoice ID: MD5972

Bill To
AltaGas Sonoran Energy Inc. 1411 Third Street, Suite A Port Huron, MI 48060

Facility Location
Sonoran Energy Project 15560 West Hobsonway Blythe, CA 92225

Due Date: 05/24/2016

Co./Fac. No. 1437 / 2472

Trans Date	Fee Type	Permit Description	Permit Number	Amount
04/14/2016	PERMITFEE	AUXILIARY BOILER,	B011901	370.84
04/14/2016	PERMITFEE	COMBUSTION TURBINE GENERATOR POWER BLOCK	B008877	19546.22

Customer Copy

Total: \$19,917.06

Please make checks payable to Mojave Desert AQMD. Please return remit copy with remittance.
 For credit card payment please visit our website at www.mdaqmd.ca.gov



Mojave Desert Air Quality Management District
 14306 Park Avenue, Victorville, CA 92392-2310
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INVOICE

04/14/2016

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Remit Copy

Total: \$19,917.06

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 For credit card payment please visit our website at www.mdaqmd.ca.gov