



DEC 18 2014

Shams Hasan **E&B Natural Resources Mgmt** 3000 James Road Bakersfield, CA 93308

RE: Notice of Final Action - Authority to Construct

> Facility Number: S-1624 **Project Number: S-1143464**

Dear Mr. Hasan:

The Air Pollution Control Officer has issued the Authority to Construct permits to E&B Natural Resources Mgmt for two new 85 MMBtu/hr natural gas-fired steam generators, at Poso Creek Oil Field in E&B Natural Resource's Heavy Oil Central Stationary Source (Section 5, Township 27S, Range 27E). 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 November 6, 2014. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on November 3, 2014. 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

Mr. Shams Hasan Page 2

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

Sincerely,

**Arnaud Marjollet** 

Director of Permit Services

AM:st

**Enclosures** 

Mike Tollstrup, CARB (w/enclosure) via email Gerardo C. Rios, EPA (w/enclosure) via email CC:

CC:





## AUTHORITY TO CONSTRUCT

**PERMIT NO: S-1624-284-0 ISSUANCE DATE: 12/10/2014** 

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES MGMT

**MAILING ADDRESS:** ATTN: SHAMS HASAN

3000 JAMES ROAD

**BAKERSFIELD, CA 93308** 

LOCATION:

**HEAVY OIL CENTRAL** 

CA

**SECTION:** 5 **TOWNSHIP:** 27S RANGE: 27E

**EQUIPMENT DESCRIPTION:** 

85 MMBTU/HR NATURAL/WASTE/TEOR/PRODUCED GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN LE-85 ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM (EB15)

### CONDITIONS

- The permittee shall submit an application to comply with Rule 2520 (Federally Mandated Operating Permits) by May 31, 2015. [District Rule 2520]
- Permit to Operate S-1624-74-1 shall be surrendered to the District and the associated equipment shall be removed or rendered inoperable not later than the date of initial operation of this emissions unit. [District Rule 2201]
- Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 2,234 lb, 2nd quarter - 2,234 lb, 3rd quarter - 2,234 lb, and fourth quarter - 2,234 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]
- Prior to operating equipment under this Authority to Construct, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: 1st quarter - 651 lb, 2nd quarter - 651 lb, 3rd quarter - 652 lb, and fourth quarter - 652 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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 efter 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 ail laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seved Sadredin, Executive Director / APCO

Marjetlet, Director of Permit Services

- 5. ERC Certificate Numbers S-3785-2, S-3788-2, S-3790-2, S-4074-2, S-4136-2, S-4138-2, S-4153-2, N-1095-4, N-1097-4, S-2603-4 (or a certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]
- 6. 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]
- 7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201 and 4301]
- 8. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c (g)]
- 9. The unit shall only be fired on gas with a maximum sulfur content of 1.0 gr S/100 scf. [District Rules 2201 and 4320]
- 10. Emissions from the gas-fired unit shall not exceed any of the following limits: 5 ppmvd NOx @ 3% O2 or 0.006 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0035 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.0182 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320]
- 11. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within five days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320]
- 12. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the permitted levels, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than one hour of operation after detection. If the portable analyzer continues to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following one 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 reestablished, 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 4305, 4306, and 4320]
- 13. All NOx, CO, and O2 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 NOx, CO and O2 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 readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 4306, and 4320]
- 14. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rule 4305, 4306, and 4320]
- 15. If the unit is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rules 2201 and 4320]
- 16. If the unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2201 and 4320]

- 17. Source testing to measure NOx and CO emissions from this unit shall be conducted within 60 days of startup and at least once every twelve months (no more than 30 days before or after the required annual source test date) thereafter. After demonstrating compliance on two consecutive annual source tests, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve months. [District Rule 2201, 4305, 4306, and 4320]
- 18. 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]
- 19. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
- 20. 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 Rules 4305, 4306 and 4320]
- 21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 22. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rule 4305, 4306 and 4320]
- 23. 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 Rules 4305, 4306 and 4320]
- 24. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19; CO (ppmv) EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) EPA Method 3 or 3A or ARB Method 100; stack gas velocities EPA Method 2; Stack gas moisture content EPA Method 4; SOx EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H2S content EPA Method 11 or 15; and fuel hhv (MMBtu) ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 1081, 4305, 4306, 4320, and 4351]
- 25. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320]
- 26. Permittee shall submit notification to the District of the date of construction, anticipated startup, and actual startup. Notifications shall be postmarked no later than 30 days after construction and 15 days after actual startup. The notifications shall include the design heat input and identification of fuels for this permit unit. [40 CFR 60.48c (a)]
- 27. Permittee shall maintain daily records of the type and quantity of fuel combusted by the steam generator. [District Rule 2201 and 40 CFR 60.48c (g)]
- 28. Records of the daily gas consumption shall be maintained on the premises. [District Rule 2201]
- 29. 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 Rules 1070, 4305, 4306, 4320, and 40 CFR 60.48c (i)]





# **AUTHORITY TO CONSTRUCT**

PERMIT NO: S-1624-285-0 ISSUANCE DATE: 12/10/2014

**LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES MGMT** 

MAILING ADDRESS: ATTN: SHAMS HASAN

3000 JAMES ROAD BAKERSFIELD, CA 93308

BAKERSFIELD, CA 9330

LOCATION: HEAVY OIL CENTRAL CA

SECTION: 5 TOWNSHIP: 27S RANGE: 27E

**EQUIPMENT DESCRIPTION:** 

85 MMBTU/HR NATURAL/WASTE/TEOR/PRODUCED GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN LE-85 ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM (EB16)

## CONDITIONS

- 1. The permittee shall submit an application to comply with Rule 2520 (Federally Mandated Operating Permits) by May 31, 2015. [District Rule 2520]
- 2. Permit to Operate S-1624-74-1 shall be surrendered to the District and the associated equipment shall be removed or rendered inoperable not later than the date of initial operation of this emissions unit. [District Rule 2201]
- 3. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter 2,234 lb, 2nd quarter 2,234 lb, 3rd quarter 2,234 lb, and fourth quarter 2,234 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]
- 4. Prior to operating equipment under this Authority to Construct, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: 1st quarter 651 lb, 2nd quarter 651 lb, 3rd quarter 652 lb, and fourth quarter 652 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

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