



APR 3 0 2013

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

RE: Notice of Final Action - Authority to Construct

> Facility Number: S-1807 **Project Number: S-1130131**

Dear Mr. Hasan:

The Air Pollution Control Officer has issued the Authority to Construct permits to E&B Natural Resources for a new 85 MMBtu/hr steam generator and for reducing a tank's throughput, at the NW/4 of Section 20, Township 30S, Range 22E near McKittrick, CA. 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 3/21/13. The District's analysis of the proposal was also sent to CARB on 3/18/13. No comments were received following the District's preliminary decision on this project.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

**Director of Permit Services** 

DW:DBT/st

**Enclosures** 

CC: Mike Tollstrup, CARB (w/enclosure) via email

Seved Sadredin

Executive Director/Air Pollution Control Officer

# Bakersfield Californian Newspaper notice for publication in Bakersfield Californian and for posting on

NOTICE OF FINAL ACTION
FOR THE ISSUANCE OF
AUTHORITY TO CONSTRUCT PERMITS

valleyair.org

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued the Authority to Construct permits to E&B Natural Resources for a new 85 MMBtu/hr steam generator and for reducing a tank's throughput, at the NW/4 of Section 20, Township 30S, Range 22E near McKittrick, CA.

No comments were received following the District's preliminary decision on this project.

The application review for Project #1130131 is available for public inspection at http://www.valleyair.org/notices/public\_notices\_idx.htm, the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308, and at any other District office. For additional information, please contact the District at (661) 392-5500.





# **AUTHORITY TO CONSTRUCT**

**PERMIT NO: S-1807-16-3** 

**ISSUANCE DATE: 04/23/2013** 

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

MAILING ADDRESS:

3000 JAMES ROAD

BAKERSFIELD, CA 93308

LOCATION:

HEAVY OIL WESTERN STATIONARY SOURCE

CA

SECTION: NW25 TOWNSHIP: 27S RANGE: 19E

**EQUIPMENT DESCRIPTION:** 

MODIFICATION OF 500 BBL FIXED-ROOF PETROLEUM STORAGE TANK (NORTH TANK HOPKINS B PROPERTY): REDUCE DAILY THROUGHPUT AND REMOVE CONDITIONS AUTHORIZING OPERATION AS A DORMANT EMISSION

### CONDITIONS

- 1. Facilities S-1807 and S-6826 are part of the same stationary source. [District Rule 2201]
- The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions. [District Rule 2530, 6.1]
- The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. This record shall be kept on site and made available to the District upon request. [District Rule 2530, 6.1]
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- To maintain status as a small producer, permittee's crude oil production shall average less than 6000 bbl/day from all operations within Kern County and permittee shall not engage in refining, transporting, or marketing of refined petroleum products. [District Rules 3020 & 4623]
- Crude oil throughput shall not exceed 500 bbl/day on a monthly average basis. [District Rule 2201]
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]

#### 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

ID WARNER, Director of Permit Services

- 8. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
- 9. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623]
- 10. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623]
- 11. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing, [District Rule 4623]
- 12. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met.

  [District Rule 4623]
- 13. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623]
- 14. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623]
- 15. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]





## AUTHORITY TO CONSTRUCT

**PERMIT NO: S-1807-69-0** 

**ISSUANCE DATE: 04/23/2013** 

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

MAILING ADDRESS:

3000 JAMES ROAD

BAKERSFIELD, CA 93308

LOCATION:

HEAVY OIL WESTERN STATIONARY SOURCE

SECTION: NW 4 TOWNSHIP: 30S RANGE: 22E

**EQUIPMENT DESCRIPTION:** 

85 MMBTU/HR NATURAL GAS/WASTE GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN LE-85 BURNER AND FLUE GAS RECIRCULATION APPROVED TO OPERATE AT VARIOUS UN SPECIFIED LOCATIONS IN S-1807

### CONDITIONS

- Facilities S-1807 and S-6826 are part of the same stationary source. [District Rule 2201]
- The permittee shall not emit more than one half of the major source threshold based on a rolling 12-month summary of actual emissions, [District Rule 2530, 6.1]
- The permittee shall maintain a record of the rolling 12-month summary of actual emissions from permitted operations. This record shall be kept on site and made available to the District upon request. [District Rule 2530, 6.1]
- Unit shall not be located closer than 1000' from any receptor. [District Rule 4102]
- 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]
- This unit shall be equipped with a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer). [CEQA]
- This unit shall be equipped with variable frequency drive high efficiency electrical motors driving the blower and water pump. [CEQA]
- 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, 4301, 5.1 and 5.2.3]

#### CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

VID WARNER, Director of Permit Services

- 9. 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]
- 10. The unit shall only be fired on natural gas with a maximum sulfur content of 5.0 gr S/100 scf. [District Rules 2201 and 4320]
- 11. Emission rates shall not exceed any of the following: NOx (as NOx): 5 ppmvd @ 3% O2 or 0.0061 lb/MMBtu; SOx:0.0143 lb/MMBtu; PM10: 0.0076 lb/MMBtu; CO: 50 ppmvd @ 3% O2 or 0.0370 lb-CO/MMBtu; or VOC: 0.0055 lb/MMBtu. [District Rules 2201 and 4320]
- 12. Permittee shall maintain records of duration of each start-up and shutdown for a period of five years and make such records readily available for District inspection upon request. [District Rule 4320]
- 13. A source test to demonstrate compliance with NOx and CO emission limits shall be performed within 60 days of startup of this unit. [District Rules 2201 and 4320]
- 14. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). 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 (12) months. [District Rules 2201, 4305, 4306 and 4320]
- 15. 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]
- 16. 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 2201, 4305, 4306 and 4320]
- 17. 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 Rule 2201, 4305, 4306, 4320]
- 18. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]
- 19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 20. 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 analyzer 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 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320]
- 21. If the NOx or CO concentrations corrected to 3%, as measured by the portable analyzer, exceed the applicable emission limit, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour 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 performing the notification and testing required by this condition. [District Rules 4102, 4305, 4306 and 4320]

- 22. 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 sample 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 4102, 4305, 4306 and 4320]
- 23. 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 within the acceptable range. [District Rules 4305, 4306 and 4320]
- 24. 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 PTO, 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 Rules 4305, 4306 and 4320]
- 25. Shorter time periods for demonstration of compliance after startup or re-ignition may be approved by the APCO by submittal of appropriate technical justification upon implementation of this ATC. [District Rule 2201]
- 26. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320]
- 27. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320]
- 28. 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]
- 29. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320]
- 30. 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 and 4320]
- 31. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this ATC. Approval of the equivalent equipment shall be made in writing and only after the District's determination that the submitted design and performance of the proposed alternative equipment is equivalent to the authorized equipment. [District Rule 2010]
- 32. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emissions rates, equipment drawing(s) and operational characteristics/parameters. [District Rule 2010]
- 33. ATCs S-1807-16-3, '36-7, '53-3 and '56-1 shall be implemented prior to or concurrently with this ATC. [District Rule 2201]