



JUN 13 2012

Mr. Terry Ellis  
Macpherson Oil Company  
P.O. Box 5368  
Bakersfield, CA 93388

**Re: Final - Authority to Construct / COC (Significant Mod)  
District Facility # S-1703  
Project # S-1120718**

Dear Mr. Ellis:

The Air Pollution Control Officer has issued an Authority to Construct (S-1703-210-0) with a Certificate of Conformity to Macpherson Oil Company at Round Mountain Oil Field (SE/4 Section 18, T28S, R29E) in Kern County. The applicant proposes to install a 85 MMBtu/hr natural gas-fired steam generator.

Enclosed is the Authority to Construct. The application and proposal were sent to US EPA Region IX on April 30, 2012. No comments were received following the District's preliminary decision on this project.

The notice of final decision for this project will be published approximately three days from the date of this letter.

Prior to operating with modifications authorized by the Authority to Construct, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,



David Warner  
Director of Permit Services

Enclosures  
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**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**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



JUN 13 2012

Gerardo C. Rios, Chief  
Permits Office  
Air Division  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

**Re: Final - Authority to Construct / COC (Significant Mod)  
District Facility # S-1703  
Project # S-1120718**

Dear Mr. Rios:

The Air Pollution Control Officer has issued an Authority to Construct (S-1703-210-0) with a Certificate of Conformity to Macpherson Oil Company at Round Mountain Oil Field (SE/4 Section 18, T28S, R29E) in Kern County. The applicant proposes to install a 85 MMBtu/hr natural gas-fired steam generator.

Enclosed is a copy of the Authority to Construct. The application and proposal were sent to US EPA Region IX on April 30, 2012. No comments were received following the District's preliminary decision on this project.

The notice of final decision for this project will be published approximately three days from the date of this letter.

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David Warner  
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**JUN 13 2012**

Mike Tollstrup, Chief  
Project Assessment Branch  
Air Resources Board  
P O Box 2815  
Sacramento, CA 95812-2815

**Re: Final - Authority to Construct / COC (Significant Mod)  
District Facility # S-1703  
Project # S-1120718**

Dear Mr. Tollstrup:

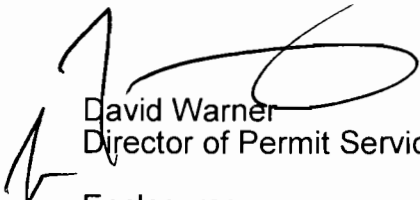
The Air Pollution Control Officer has issued an Authority to Construct (S-1703-210-0) with a Certificate of Conformity to Macpherson Oil Company at Round Mountain Oil Field (SE/4 Section 18, T28S, R29E) in Kern County. The applicant proposes to install a 85 MMBtu/hr natural gas-fired steam generator.

Enclosed is a copy of the Authority to Construct. The application and proposal were sent to US EPA Region IX on April 30, 2012. No comments were received following the District's preliminary decision on this project.

The notice of final decision for this project will be published approximately three days from the date of this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,



David Warner  
Director of Permit Services

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**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**NOTICE OF FINAL DECISION  
FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT AND  
THE PROPOSED SIGNIFICANT MODIFICATION OF FEDERALLY  
MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District has made its final decision to issue an Authority to Construct to Macpherson Oil Company for heavy oil facility located at Round Mountain Oil Field (SE/4 Section 18, T28S, R29E) in Kern County, California. The applicant proposes to install a 85 MMBtu/hr natural gas-fired steam generator.

The District's analysis of the legal and factual basis for this proposed action, project #S-1120718, is available for public inspection at the District office at the address below. For additional information regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900, or contact David Warner, Director of Permit Services, in writing at SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.



# AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-1703-210-0

**ISSUANCE DATE:** 06/07/2012

**LEGAL OWNER OR OPERATOR:** MACPHERSON OIL COMPANY

**MAILING ADDRESS:** PO BOX 5368  
BAKERSFIELD, CA 93388

**LOCATION:** HEAVY OIL CENTRAL STATIONARY SOURCE  
CA

**SECTION:** SE18 **TOWNSHIP:** 28S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN QLN-II ULTRA LOW-NOX BURNER (OR EQUIVALENT) AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

## CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

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

  
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DAVID WARNER, Director of Permit Services  
S-1703-210-0 Jun 7 2012 9:15AM - TOMS : Joint Inspection NOT Required

6. No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit shall be equipped with horizontal convection section with at least 235 square feet of bare tube surface area (or thermodynamically equivalent number of square feet of finned tube) per MMBtu/hr of heat input and variable frequency drive high efficiency electrical motors driving the blower and water pump. Documentation showing this unit is so equipped shall be retained on site. [Public Resources Code 21000-21177, California Environmental Quality Act]
8. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 1,303 lb, 2nd quarter - 1,303 lb, 3rd quarter - 1,303 lb, and fourth quarter - 1,303 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] Federally Enforceable Through Title V Permit
9. Prior to operating equipment under this Authority to Construct, permittee shall surrender PM10 emission reduction credits for the following quantity of emissions: 1st quarter - 556 lb, 2nd quarter - 556 lb, 3rd quarter - 557 lb, and fourth quarter - 557 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). SOx ERCs may be used to offset PM10 increases at an interpollutant ratio of 1.000 lb-SOx: 1.0 lb-PM10. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 1,023 lb, 2nd quarter - 1,024 lb, 3rd quarter - 1,024 lb, and fourth quarter - 1,024 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] Federally Enforceable Through Title V Permit
11. ERC Certificate Numbers N-995-2, C-1102-5, N-1009-5, S-3674-5, S-3726-1 (or a certificate 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] Federally Enforceable Through Title V Permit
12. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
13. 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] Federally Enforceable Through Title V Permit
14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
15. 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)] Federally Enforceable Through Title V Permit
16. The unit shall only be fired on natural gas with a maximum sulfur content of 1.0 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
17. 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] Federally Enforceable Through Title V Permit
18. If the unit is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the unit shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Emissions rates from unit shall not exceed any of the following limits: 5.85 ppmv NOx @ 3% O2 or 0.0070 lb-NOx/MMBtu, 0.00299 lb-PM10/MMBtu, 25 ppmv CO @ 3% O2 or 0.0182 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. A source test to demonstrate compliance with NO<sub>x</sub> and CO emission limits shall be performed within 60 days of initial startup of this unit. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
21. Source testing to measure NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (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 (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
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. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
24. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
25. 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] Federally Enforceable Through Title V Permit
26. 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] Federally Enforceable Through Title V Permit
27. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O<sub>2</sub>) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; SO<sub>x</sub> - EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H<sub>2</sub>S content - EPA Method 11 or 15; and fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 1081, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
28. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> 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 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
29. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, 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 the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
30. 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] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

31. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (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] Federally Enforceable Through Title V Permit
32. Operator shall provide that fuel hhv be certified by third party fuel supplier or determined annually by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
33. 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)] Federally Enforceable Through Title V Permit
34. 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)] Federally Enforceable Through Title V Permit
35. 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] Federally Enforceable Through Title V Permit
36. 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)] Federally Enforceable Through Title V Permit