NOV 17 2017

Mr. John Ludwick
Aera Energy LLC
PO Box 11164
Bakersfield, CA 93389

Re: Final - Authority to Construct / Certificate of Conformity (Significant Mod)
District Facility # S-1547
Project # 1171938

Dear Mr. Ludwick:

The Air Pollution Control Officer has issued Authority to Construct (ATC) S-1547-414-16 with a Certificate of Conformity to Aera Energy LLC at western Kern County. The project authorizes a modification to a flare. Enclosed is the ATC 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 ATC was published on September 27, 2017. The District’s analysis of the proposal was also sent to CARB and US EPA Region IX on September 22, 2017. No comments were received following the District’s preliminary decision on this project.

Prior to operating with the modifications authorized by the ATC, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5. Application forms are found on the District’s website at www.valleyair.org/permits/TVforms.

Seyed Sadredin
Executive Director/Air Pollution Control Officer
Mr. John Ludwick
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Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

[Signature]
Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email
AUTHORITY TO CONSTRUCT (ATC)

**QUICK START GUIDE**

1. **Pay Invoice:** Please pay enclosed invoice before due date.

2. **Modify Your Title V Permit:** Prior to operating the equipment authorized under this ATC, submit an application to modify your Title V permit. See application forms at http://www.valleyair.org/busind/pto/ptoforms/1ptoformidx.htm.

3. **Fully Understand ATC:** Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.

4. **Follow ATC:** You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.

5. **Notify District:** You must notify the District’s Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District’s Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.

6. **Source Test:** Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source_testing.htm for source testing resources.

7. **Maintain Records:** Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years. Sample record keeping forms can be found at http://www.valleyair.org/busind/comply/compliance_forms.htm.

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

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

Seyed Sadreolin
Executive Director/Air Pollution Control Officer

**Northern Region**
4800 Enterprise Way
Modesto, CA 95356-8716
Tel: (209) 557-8400 FAX: (209) 557-6476

**Central Region (Main Office)**
1980 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-8900 FAX: (559) 230-8961

**Southern Region**
34946 Flyover Court
Bakersfield, CA 93308-8726
Tel: 661-392-5600 FAX: 661-392-5666

www.valleyair.org  www.healthyairliving.com
AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-414-16
LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164
LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW26   TOWNSHIP: 29S   RANGE: 22E
EQUIPMENT DESCRIPTION:
MODIFICATION OF 49 MMBTU/HR KALDAIR MODEL P-20-E PIPE STANDBY FLARE, WITH UP TO TWO SULFATREAT VESSELS (AV DEHY): INCREASE ANNUAL FLARED GAS LIMIT

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. ATC shall be implemented subsequent to or concurrently with ATC S-1547-414-13. [District Rule 2201] Federally Enforceable Through Title V Permit

4. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOX emission reduction credits for the following quantity of emissions: 1st quarter - 121 lb, 2nd quarter - 121 lb, 3rd quarter - 122 lb, and fourth quarter - 122 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [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 PMT 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

Sabaud Marjollet, Director of Permit Services

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585
5. ERC Certificate Number S-4284-2 (or a certificate split from this certificate) 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

6. Prior to operating equipment under this Authority to Construct, permittee shall surrender SOX emission reduction credits for the following quantity of emissions: 1st quarter - 572 lb, 2nd quarter - 573 lb, 3rd quarter - 573 lb, and fourth quarter - 573 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

7. ERC Certificate Number S-2008-5 (or a certificate split from this certificate) 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

8. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 112 lb, 2nd quarter - 112 lb, 3rd quarter - 113 lb, and fourth quarter - 113 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

9. ERC Certificate Number S-4444-1 (or a certificate split from this certificate) 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

10. Visible emissions from flare shall be less than 5% opacity, except for a period or periods aggregating three minutes or less in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Only natural gas shall be used as pilot fuel. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Flare shall be equipped with an operational gas volume flow meter. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit

13. Flare shall be equipped with a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device capable of continuously detecting at least one pilot flame or the flare flame is present. The flame detection device shall be kept operational at all times except during flare maintenance when the flare is isolated from gas flow. During essential planned power outages when the flare is operating, the pilot monitor is allowed to be non-functional if the flare flame is clearly visible to onsite operators. Effective on and after July 1, 2012, all pilot monitor downtime shall be reported annually pursuant to Rule 4311, section 6.2.3.6. [District Rule 4311] Federally Enforceable Through Title V Permit

14. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit

15. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit

16. If the flare uses a flow-sensing automatic ignition system and does not use a continuous flame pilot, the flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit

17. Open flares in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit

18. Flare shall operate only when S-1547-704 CVR compressors are not operating or are incapable of compressing all gas from TEOR systems. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Flare shall not be operated continuously for more than 30 consecutive days. Flare is not continuous when flaring has ceased for three (3) or more consecutive hours. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Volume of gas combusted in flare shall not exceed 1.2 MMscf/day and 22 MMscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Emissions from flare shall not exceed any of the following: PM10: 4.06 lb/MMscf, SOx: 162.06 lb/MMscf (as SO2), NOx: 34.5 lb/MMscf (as NO2), VOC: 31.97 lb/MMscf, CO: 187.74 lb/MMscf. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Sulfur compound concentration (as H2S) of gas flared shall not exceed 961 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Efficiency of sulfur removal unit shall be maintained at not less than 95% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Permittee shall demonstrate compliance with sulfur compound concentration limit and sulfur removal efficiency at least once every 12.6 MMscf of gas treated, by sample analysis of inlet and outlet gas streams of sulfur removal unit. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Permittee shall maintain a record of all sample analysis made of inlet and outlet gas streams, and upon request, shall make the most recent record available for District inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

26. The VOC content of the gas handled by the SulfaTreat vessels shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Operator shall conduct quarterly gas sampling for gas handled by the SulfaTreat vessels and their associated components to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. Representative gas samples are acceptable to determine VOC content (i.e. the SulfaTreat units and flare do not need to be operated to obtain sample). Quarterly samplings shall be reduced to annual samplings if gas samples contain VOC content equal to or less than 10% by weight for eight (8) consecutive quarterly samplings. [District Rule 2201] Federally Enforceable Through Title V Permit

28. VOC content of gas handled by the SulfaTreat vessels and their associated components shall be determined by ASTM D1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Permittee shall maintain a record of the VOC content test results for the gas handled by the SulfaTreat vessels and their associated components for a period of five years and make such records available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Permittee shall keep accurate records of dates and volumes of gas flared. Such records shall be retained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1332-36-0
LEGAL OWNER OR OPERATOR: PYRAMID OIL CO
MAILING ADDRESS: PO BOX 832
BAKERSFIELD, CA 93302 0832
LOCATION: LIGHT OIL WESTERN
CA

EQUIPMENT DESCRIPTION: 400 BBL FIXED ROOF CRUDE OIL WASH TANK (PIKE LEASE)

CONDITIONS

1. §(98) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

2. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions. [District Rule 4623]

3. This tank shall only store, place, or hold crude oil with a true vapor pressure (TVP) of less than 1.0 psia under all storage conditions. [District Rules 2201 and 4623]

4. 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 2201 and 2530]

5. §(3804) 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]

6. $(2495) Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623]

7. $(2496) Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rule 4623]

8. $(3805) 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]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

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9. 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]