



FEB 0 1 2011

Adean Valenzuela Aera Energy LLC P O Box 11164 Bakersfield, CA 93389-1164

Re: **Notice of Significant Title V Permit Modification**

District Facility # S-1547 **Project # S-1105222**

Dear Ms. Valenzuela:

Enclosed for you to review is the District's analysis of an application for significant Title V permit modification for the facility identified above. Aera Energy LLC is proposing a Title V significant permit modification to The project is to modify permit unit S-1547-1011 for a heater treater to revise the recordkeeping requirements to require records of startup and shutdown occurrences that exceed one hour per occurrence.

Enclosed are the current Title V permit, proposed modified Title V permit, engineering evaluation, and application. The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

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,

Director of Permit Services

DW: HR/cm

Enclosures

Seyed Sadredin

Executive Director/Air Pollution Control Officer





FEB **0 1** 2011

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

Notice of Significant Title V Permit Modification

District Facility # S-1547 Project # S-1105222

Dear Mr. Rios:

Enclosed for you to review is the District's analysis of an application for significant Title V permit modification for the facility identified above. Aera Energy LLC is proposing a Title V significant permit modification to The project is to modify permit unit S-1547-1011 for a heater treater to revise the recordkeeping requirements to require records of startup and shutdown occurrences that exceed one hour per occurrence.

Enclosed are the current Title V permit, proposed modified Title V permit, engineering evaluation, and application. The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

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,

David Warner

Director of Permit Services

DW: HR/cm

Enclosures

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





FEB 0 1 2011

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

Re: Notice of Significant Title V Permit Modification

> District Facility # S-1547 Project # S-1105222

Dear Mr. Tollstrup:

Enclosed for you to review is the District's analysis of an application for significant Title V permit modification for the facility identified above. Aera Energy LLC is proposing a Title V significant permit modification to The project is to modify permit unit S-1547-1011 for a heater treater to revise the recordkeeping requirements to require records of startup and shutdown occurrences that exceed one hour per occurrence.

Enclosed are the current Title V permit, proposed modified Title V permit, engineering evaluation, and application. The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

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.

David Warner

Director of Permit Services

DW: HR/cm

Enclosures

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Southern Region

NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED MODIFICATION OF FEDERALLY MANDATED OPERATING PERMIT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed modification of the Federally Mandated Operating Permit to Aera Energy LLC for its heavy oil facility at the NE/4 Section 35, Township 12N, Range 24W, in the Kern County Heavy Oil Western stationary source, California. The project is to modify permit unit S-1547-1011 for a heater treater to revise the recordkeeping requirements to require records of start-up and shutdown occurrences that exceed one hour per occurrence.

The District's analysis of the legal and factual basis for this proposed action, project available public inspection #S-1105222. for is http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested by the public, the District will hold a public hearing regarding issuance of this modification. For additional information, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

TITLE V APPLICATION REVIEW

Significant Modification Project #: S-1105222

Engineer: Homero Ramirez

Date: January 19, 2011

Facility Number: S-1547

Facility Name: Aera Energy LLC Mailing Address: P O Box 11164

Bakersfield, CA 93389-1164

Contact Name: Adean Valenzuela

Phone: (661) 665-5335

Responsible Official: J.M. Ohman

Title: Manager of Operations

I. PROPOSAL

Aera Energy LLC is proposing a Title V significant permit modification to the Title V operating permit. The applicant is proposing to modify permit unit S-1547-1011-14 for a heater treater to revise the recordkeeping requirements to require records of start-up and shutdown occurrences that exceed one hour per occurrence. The condition will be revised as follows:

"Permittee shall maintain records of duration of each start-up and shutdown that exceed one hour per occurrence, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4307]"

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

The equipment is located at the NE/4 Section 35, Township 12N, Range 24W in the South Midway Field, in the Kern County Heavy Oil Western stationary source.

III. EQUIPMENT DESCRIPTION

Pre-Project

S-1547-1011-14: NATURAL GAS-FIRED HEATER TREATER (#D201G) WITH ONE 5 MMBTU/HR MAXON MODEL M-PAKT BURNER WITH AND A FLUID TREATMENT CHAMBER SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1547-843 (SOUTH MIDWAY)

Post-Project

S-1547-1011-15: NATURAL GAS-FIRED HEATER TREATER (#D201G) WITH ONE 5 MMBTU/HR MAXON MODEL M-PAKT BURNER WITH AND A FLUID TREATMENT CHAMBER SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1547-843 (SOUTH MIDWAY)

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a significant modification because the applicant is proposing to relax recordkeeping requirements. As such, this project requires public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, <u>Federally Mandated Operating Permits</u> (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Aera Energy LLC is proposing to modify permit unit to modify condition 16 on permit unit S-1547-1011-14 to revise the recordkeeping requirements to require records of start-up and shutdown occurrences that exceed one hour per occurrence as is allowed by the current version of District Rule 4307 (Boilers, Steam Generators, and Process Heaters – 2.0 MMBtu/hr to 5.0 MMBtu/hr) Section 5.4.1. The condition will be revised as follows:

"Permittee shall maintain records of duration of each start-up and shutdown that exceed one hour per occurrence, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4307]"

VII. COMPLIANCE

District Rule 2520, Section 6.0 describes the source's ability to make changes including significant permit modification. This modification does not meet the minor permit modification criteria pursuant to Section 3.20 described as follows.

- 1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
- Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions:
- Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- 4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act: and
- Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act: and
- 6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of Section 11.3 by including:

- 1. The identification of the source, the name and address of the permit holder, the activities and emissions change involved in the permit action;
- 2. The name and address of the District, the name and telephone number of District staff to contact for additional information;
- 3. The availability, upon request, of a statement that sets forth the legal and factual basis for the proposed permit conditions;
- The location where the public may inspect the complete application, the District analysis, the proposed permit, and all relevant supporting materials;

- 5. A statement that the public may submit written comments regarding the proposed decision within at least 30 days from the date of publication and a brief description of commenting procedures, and
- 6. A statement that members of the public may request the APCO or his designee to preside over a public hearing for the purpose of receiving oral public comment, if a hearing has not already been scheduled. The APCO shall provide notice of any public hearing scheduled to address the proposed decision at least 30 days prior to such hearing;

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permit No. S-1547-1011-15
- B. Previous Title V Operating Permit No. S-1547-1011-14
- C. Emissions Increases
- D. Application

ATTACHMENT A

Proposed Modified Title V Operating Permit No. S-1547-1011-15

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1547-1011-15

SECTION: NE35 TOWNSHIP: 12N RANGE: 24W

EQUIPMENT DESCRIPTION:

NATURAL GAS-FIRED HEATER TREATER (#D201G) WITH ONE 5 MMBTU/HR MAXON MODEL M-PAKT BURNER WITH AND A FLUID TREATMENT CHAMBER SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1547-

843 (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

1. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

- 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
- 3. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 6. {520} The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
- 7. {557} When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. 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 semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 8. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or EPA Method 6B; or EPA Method 8; or ARB Methods 8 or 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 9. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 4468, D 4084, D3246 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC
Location: HEAVY OIL WESTERN STATIONARY SOURCE, KERN-COUNTY, CA
\$1547-101-15: Jan 20 2011 3-19M - RAMIREZH

- 10. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Emission rates, except during startup and shutdown shall not exceed any of the following: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, or CO: 0.037 lb/MMBtu or 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4307, 4405, 4406, 4801 and Kern County Rules 424 and 425] Federally Enforceable Through Title V Permit
- 12. Emission rates during startup and shutdown shall not exceed: particulate matter 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4301, 4405, 4406, 4801 and Kern County Rules 424 and 425] Federally Enforceable Through Title V Permit
- 13. Emission rates shall not exceed any of the following: PM10: 1.0 lb/day, SOx (as SO2): 0.2 lb/day, NOx (as NO2): 24.0 lb/day or 3154 lb/year, or CO: 20.2 lb/day or 3241 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Duration of start-up and shutdown shall not exceed one hour each per occurrence. [District Rule 4307] Federally Enforceable Through Title V Permit
- 15. Duration of refractory curing shall not exceed 30 hours each per occurrence. Permittee shall notify the District in writing prior to refractory curing. [District Rule 2080] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of duration of each start-up and shutdown that exceed one hour per occurrence, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4307] Federally Enforceable Through Title V Permit
- 17. The permittee shall monitor, at least once per month, the units's operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307] Federally Enforceable Through Title V Permit
- 18. The permittee shall tune the unit at least twice per calendar year, (from four to eight months apart) using a qualified technician in accordance with the procedure described in Rule 4304. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for a calendar year. No tune-up is required if the unit is not operated during that calendar year. The unit may be test fired to verify availability of the unit for its intended use, but once the test firing is complete the unit shall be shutdown. In lieu of tuning the unit, the operator shall monitor the emissions, at least monthly, with a portable NOx analyzer and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307] Federally Enforceable Through Title V Permit
- 19. If the unit is tuned for compliance, the permittee shall maintain records of: (1) the date that tune-ups are performed, (2) a description of any corrective action taken to maintain the emissions within the acceptable range, and (3) a record of the operational characteristics monitored. [District Rule 4307] Federally Enforceable Through Title V Permit
- 20. If NOx emissions are monitored for compliance, the permittee shall maintain records of: (1) the date and time of the NOx measurements, (2) the O2 concentration in percent and the measured NOx concentration corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, (5) a description of any corrective action taken to maintain the emissions within the acceptable range, and (6) a record of the operational characteristics monitored. [District Rule 4307] Federally Enforceable Through Title V Permit
- 21. 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. 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 4307. Notwithstanding the requirements above and per Section 5.5.4 of Rule 4307, for units with a cyclical firing period that routinely interrupts fuel flow as part of its normal operation, source testing may commence sooner than specified above and continue through its normal cyclical firing period. [District Rule 4307] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC
Location: HEAVY OIL WESTERN STATIONARY SOURCE KERN COUNTY, CA
5-1697-101-161-Jan 20 2011-31-PM - RAMREZH

- 22. The source test plan shall identify which basis (ppmy or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4307] Federally Enforceable Through Title V Permit
- 23. 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. 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 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 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) - ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - ASTM D1072, D4468, D3246, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4307] Federally Enforceable Through Title V Permit
- 25. 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 Rule 4307] Federally Enforceable Through Title V Permit
- 26. Vessel covers, inspection hatches, etc. shall be maintained in gas-tight (as defined in Rule 4623 (9/19/91)) condition except during vessel cleaning, repair and maintenance. Gas leak shall be defined as emitting more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 28. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 29. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 30. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 31. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 32. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9 4:2] Federally Enforceable Through Title V Permit
 PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
 These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC Location: HEAVY OIL WESTERN STATIONARY SOURCE KERN COUNTY, CA 8-1547-1011-15: Jan 20 2011 2-41PM - RAMIREZH

- 33. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 34. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 35. Note: Formerly S-1511-646.

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC
Location: HEAVY OIL WESTERN STATIONARY SOURCE.

ATTACHMENT B

Previous Title V Operating Permit No. S-1547-1011-14

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1547-1011-14

EXPIRATION DATE: 05/31/2007

SECTION: NE35 TOWNSHIP: 12N RANGE: 24W

EQUIPMENT DESCRIPTION:

NATURAL GAS-FIRED HEATER TREATER (#D201G) WITH ONE 5 MMBTU/HR MAXON MODEL M-PAKT BURNER WITH AND A FLUID TREATMENT CHAMBER SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1547-843 (SOUTH MIDWAY)

PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 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 41011]
- 3. Heater treater shall be fired exclusively on natural gas or LPG and shall have no provisions for firing on fuel oil. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Fluid treatment chamber of heater treater shall be connected to vapor control system listed on PTO S-1547-843. [District Rule 2201] Federally Enforceable Through Title V Permit
- Copies of all fuel invoices showing quantity and delivery points of gas delivered and copies of quality terms of gas delivery contracts shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 6. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
- When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. 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 semiannually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6; or EPA Method 6B; or EPA Method 8; or ARB Methods 8 or 100; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by double GC for H2S and mercaptans performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 4468, D 4084, D3246 or grab sample analysis by double GC for H2S and mercaptans performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Location: HEAVY OIL WEST 8-1547-1011-14: Jan 19 2011 2:52PM - RAMIREZH HEAVY OIL WESTERN STATIONARY SOURCE, KERN COUNTY, CA

- 10. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Emission rates, except during startup and shutdown shall not exceed any of the following: PM10: 0.008 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, or CO: 0.037 lb/MMBtu or 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4201, 4301, 4307, 4405, 4406, 4801 and Kern County Rules 424 and 425]
- 12. Emission rates during startup and shutdown shall not exceed: particulate matter 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur 200 pounds of SO2 per hour, or 2000 ppmv as SO2, or 0.11 pounds sulfur (as S) per MMBtu on average-wide basis for all units in Rule 4406 plan; NO2 140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4301, 4405, 4406, 4801 and Kern County Rules 424 and 425] Federally Enforceable Through Title V Permit
- 13. Emission rates shall not exceed any of the following: PM10: 1.0 lb/day, SOx (as SO2): 0.2 lb/day, NOx (as NO2): 24.0 lb/day or 3154 lb/year, or CO: 20.2 lb/day or 3241 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Duration of start-up and shutdown shall not exceed one hour each per occurrence. [District Rule 4307]
- 15. Duration of refractory curing shall not exceed 30 hours each per occurrence. Permittee shall notify the District in writing prior to refractory curing. [District Rule 2080] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of duration of each start-up and shutdown, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4307]
- 17. The permittee shall monitor, at least once per month, the units's operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
- 18. The permittee shall tune the unit at least twice per calendar year, (from four to eight months apart) using a qualified technician in accordance with the procedure described in Rule 4304. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for a calendar year. No tune-up is required if the unit is not operated during that calendar year. The unit may be test fired to verify availability of the unit for its intended use, but once the test firing is complete the unit shall be shutdown. In lieu of tuning the unit, the operator shall monitor the emissions, at least monthly, with a portable NOx analyzer and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
- 19. If the unit is tuned for compliance, the permittee shall maintain records of: (1) the date that tune-ups are performed, (2) a description of any corrective action taken to maintain the emissions within the acceptable range, and (3) a record of the operational characteristics monitored. [District Rule 4307]
- 20. If NOx emissions are monitored for compliance, the permittee shall maintain records of: (1) the date and time of the NOx measurements, (2) the O2 concentration in percent and the measured NOx concentration corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, (5) a description of any corrective action taken to maintain the emissions within the acceptable range, and (6) a record of the operational characteristics monitored. [District Rule 4307]
- 21. 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. 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 4307. Notwithstanding the requirements above and per Section 5.5.4 of Rule 4307, for units with a cyclical firing period that routinely interrupts fuel flow as part of its normal operation, source testing may commence sooner than specified above and continue through its normal cyclical firing period. [District Rule 4307]
- 22. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4307]

- 23. 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. 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 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 10B or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, SOx (lb/MMBtu) ARB Method 8 or 100 or EPA Method 6, 6B or 8 or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content ASTM D1072, D4468, D3246, D3246, D4084 or double GC for H2S and mercaptans performed in laboratory, fuel gas hhv ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 1081 and 4307]
- 25. 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 Rule 4307]
- 26. Vessel covers, inspection hatches, etc. shall be maintained in gas-tight (as defined in Rule 4623 (9/19/91)) condition except during vessel cleaning, repair and maintenance. Gas leak shall be defined as emitting more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 28. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 29. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 30. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 31. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 32. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

- 33. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 34. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 35. Note: Formerly S-1511-646.

ATTACHMENT C

Emission Increases

Condition 13 limits the emissions rates as follows:

"Emission rates shall not exceed any of the following: PM10: 1.0 lb/day, SOx (as SO2): 0.2 lb/day, NOx (as NO2): 24.0 lb/day or 3154 lb/year, or CO: 20.2 lb/day or 3241 lb/yr. [District Rule 2201] "

There are no throughput, increases in operation, or emission factor changes. Therefore, no changes in emissions are expected.

ATTACHMENT D

Application

San Joaquin Valley Air Pollution Control District

APPLICATION FOR TITLE V MODIFICATION:

ADMINISTRATIVE AMENDMENT

[]

RECEIVED

DEC 15 2010

[X] SIGNIFICANT MODIFICATION		Southern Region
1. PERMIT TO BE ISSUED TO: Aera Energy LLC		
2. MAILING ADDRESS: STREET/P.O. BOX: P.O. Box 11164 CITY: Bakersfield STATE: CA ZIP CODE:	93389-1164	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:	INSTAL	LATION DATE:
STREET: Heavy Oil Western Stationary Source	1	
CITY: Fresno County, CA		
1/4 SECTION NE35 TOWNSHIP 12N RANGE 24W		
4. GENERAL NATURE OF BUSINESS: Oil & Gas Production		
5. EQUIPMENT FOR WHICH APPLICATION IS MADE (Include Permit Nos.):		
Modify of permit S-1547-1011-14 to revise condition 16 to read: "Permittee shall maint shutdown that exceed one hour per occurrence, and refractory curing, for a period of f available for District inspection upon request. [District Rule 4307] Federally Enforceab	ive years and ma	ake such records readily
		(Use additional sheets if necessary)
6. DO YOU REQUEST A CERTIFICATE OF CONFORMITY WITH THIS ACTION?	[]YES	[] NO

FOR APCD USE ONLY:	AERA ENERGY
DATE STAMP	FILING FEE #1387 RECEIVED: \$ 71- / DATE PAID: PM 121510
	PROJECT NO.: 5-1105222 FACILITY REGION & ID: 5-1547

DATE:

ATC

NOV/NTC No.:

TYPE OR PRINT TITLE OF APPLICANT: Compliance Assurance Specialist

12-9-10

TELEPHONE NUMBER:

(661) 665-5335

7. IS THIS APPLICATION SUBMITTED AS A RESULT OF A NOV/NTC? [] YES [X] NO

8. SIGNATURE OF APPLICANT/CONTACT PERSON:

9. TYPE OR PRINT NAME OF APPLICANT/CONTACT:

12-9-10/

Adean Valenzuela

(661) 665-5202

10. FAX NUMBER:

DEC 15 2010

San Joaquin Valley Air Pollution Control District San Joaquin Valley Unified Air Pollution Control District

SJVAPCD Southern Region

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

TYPE OF PERMIT ACTION (Check appropriate box)

[] SIGNIFICANT PERMIT MODIFICATION [] ADMINISTRATIVE AMENDMENT [X] MINOR PERMIT MODIFICATION
COMPANY NAME: Aera Energy LLC FACILITY ID: S = 1547
1. Type of Organization: [X] Corporation [] Sole Ownership [] Government [] Partnership [] Utility
2. Owner's Name: Aera Energy LLC
3. Agent to the Owner: N/A
II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation): Based on information and belief formed after reasonable inquiry, the emissions units identified in this application will continue to comply with the applicable federal requirement(s). Based on information and belief formed after reasonable inquiry, the emissions units identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis. Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted. Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.
I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:
12-13-10
Signature of Responsible Official Date
J.M. Ohman
Name of Responsible Official (please print)
Managen of Operations
Title of Responsible Official (please print)

Modify PTO S-1547-1011-14

I.



RECEIVED

DEC 15 2010

SJVAPCD Southern Region

December 9, 2010

HAND DELIVERED TO BAKERSFIELD OFFICE

Mr. Samir Sheikh San Joaquin Valley Unified Air Pollution Control District 1990 East Gettysburg Avenue Fresno, CA 93726-0244

Dear Mr. Sheikh:

SUBJECT:

APPLICATION FOR TITLE V MODIFICATION

FOR FACILITY S-1547

Aera Energy LLC (Aera) requests that the Title V permit for Facility S-1547 be modified to revise permit S-1547-1011-11 condition 16 to read: "Permittee shall maintain records of duration of each start-up and shutdown *that exceed one hour per occurrence*, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rule 4307] Federally Enforceable Through Title V Permit".

I have attached the appropriate application form, compliance certification form, and a copy of the current Permit to Operate.

Thank you for your attention to this matter. Should you have any questions concerning this application, please contact me at (661) 665-5335 or via email at alvalenzuela@aeraenergy.com.

Sincerely,

Adean Valenzuela

Compliance Assurance Specialist

ALV:alv

Attachment

cc:

Aera Energy LLC

Robert Beebout, Air Advisor

Perry Harrison, CAS