San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

DEC 2 9 2009

John Haley, Environmental Engineer
Aera Energy LLC
PO Box 11164
Bakersfield, CA 93389-1164

Re: Notice of Minor Title V Permit Modification
District Facility # S-1548
Project # S-1082245

Dear Mr. Haley:

Enclosed is the District's analysis of your application for a minor modification to the Title V permit for Aera Energy, facility # S-1548. You proposed to incorporate Authorities to Construct (ATC's) S-1548-144-35 and '-501-0 into the Title V operating permit. The ATC's authorize the installation of a new 55,000 gallon free water knockout vessel (S-1548-501-0) at the Section 20 Dehydration Facility, and the connection of this new vessel to an existing vapor control system that is listed on permit unit S-1548-144.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, ATC's S-1548-144-35 and '-501-0, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

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

Sincerely,

David Warner
Director of Permit Services

Enclosures

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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4800 Enterprise Way
Modesto, CA 95356-8718
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DEC 2 9 2009

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

Re: **Notice of Minor Title V Permit Modification**
District Facility # S-1548
Project # S-1082245

Dear Mr. Rios:

Enclosed for you to review is an application for a minor modification to the Title V permit for Aera Energy, facility #S-1548. Aera Energy is proposing to incorporate Authorities to Construct (ATC's) S-1548-144-35 and '-501-0 into its Title V operating permit. The ATC's authorize the installation of a new 55,000 gallon free water knockout vessel (S-1548-501-0) at the Section 20 Dehydration Facility, and the connection of this new vessel to an existing vapor control system that is listed on permit unit S-1548-144.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, Authorities to Construct S-1548-144-35 and '-501-0, emission increases, application, and previous Title V permit. 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. Jim Swaney at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

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TITLE V APPLICATION REVIEW

Minor Modification
Project #: S-1082245

Engineer: Brian Clerico
Date: December 10, 2009

Facility Number: S-1548
Facility Name: Aera Energy LLC
Mailing Address: PO Box 11164
Bakersfield, CA 93389-1164

Contact Name: John Haley, Environmental Engineer
Phone: (661) 665-7424

Responsible Official: E. E. Patterson
Title: Process Supervisor

I. PROPOSAL

Aera Energy LLC is proposing a minor modification to their Title V permit to incorporate Authorities to Construct (ATC's) S-1548-144-35 and '-501-0 into their Title V operating permit.

The ATC's authorize the installation of a new 55,000 gallon free water knockout vessel (S-1548-501-0) at the Section 20 Dehydration Facility, and the connection of this new vessel to an existing shared vapor control system that is listed on permit unit S-1548-144.

The purpose of this evaluation is to identify all applicable requirements, to 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 in this project is located within the Belridge Oil Field, Section 20 Dehydration Facility, which is part of Aera Energy's Light Oil Western Kern County stationary source. The Section, Township, Range coordinates are Northwest Section 20, Township 28S, Range 21E.

III. EQUIPMENT DESCRIPTION

S-1548-144-39: 12,000 BBL FIXED ROOF CLARIFIER TANK 201A W/VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT (S)

& PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP (DEHY 20)

S-1548-501-1: 55,000 GALLON (12 FT DIAMETER X 65 FT LENGTH) FREE WATER KNOCKOUT VESSEL V-201H WITH VAPOR CONTROL AS DESCRIBED IN S-1548-144 (DEHY 20)

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

ATC S-1548-144-35:

Permit unit S-1548-144 is a storage tank permit where all the conditions pertaining to the operation of a shared vapor control system serving the Section 20 Dehydration Facility tank battery are contained. Hence, the purpose of ATC S-1548-144-35 was to include the new free water knockout (FWKO) vessel among the permit units that are connected to the vapor control system. No other changes were proposed.

Notes on ATC S-1548-144-35:

As indicated by the equipment description for ATC S-1548-144-35, unit S-1548-501 (the new FWKO vessel) will be added to the list of permit units connected to the vapor control system (condition #3 on ATC S-1548-144-35).

Condition #8 erroneously lists S-1548-501 among the permit units whose fugitive VOC emissions are included in the 161.0 lb-VOC/day figure. This is an error because (1) The fugitive VOC emissions rate of 0.4 lb-VOC/day is already included on the individual ATC S-1548-501-0, and (2) the VOC emission rate in condition #8 did not change with the inclusion of S-1548-501-0, even though S-1548-501-0 has 0.4 lb-VOC/day of emissions. Therefore, this error will be corrected by removing S-1548-501 from the list on condition #7 of Draft PTO S-1548-144-40. The Air Quality Engineer who issued the ATC concurred with this change.

Condition #36 on ATC S-1548-144-35 requires prior or concurrent implementation of ATC's S-1548-144-23, '-144-24, '-144-25, '-144-26, '-144-27,

'-144-29, '-144-30, '-144-31, and '-144-33. This condition has been satisfied by previous Minor Modification projects S-1063883 and S-1074831, which incorporated the above ATC's into the Title V permit.

Condition #37 requires concurrent implementation of ATC S-1548-501-0. This condition is satisfied by this Minor Modification project, which will incorporate both ATC S-1548-144-35 and '-501-0 into the Title V permit.

There is no condition on the ATC requiring that records be retained for five years; however, since the facility-wide permit S-1548-0-3 already has the standard five-year record retention requirement (condition #109), it was deemed unnecessary to add this to Permit to Operate S-1548-144-40.

The following table summarizes all the proposed changes to current PTO S-1548-144-39 as a result of implementing ATC S-1548-144-35:

Condition # on <u>current</u> PTO S-1548-144-39	**Condition # on <u>proposed</u> PTO S-1548-144-45**	**Condition is New, Modified, or Removed**	**Reason for Change from Current PTO**
--	2	New	NSR requirement listing all the permit units connected to the shared vapor control system. S-1548-501 was added to the list.

<u>ATC S-1548-501-0</u>:

ATC S-1548-501-0 is a new permit unit; therefore, there is no existing Title V PTO that it will be modifying. The ATC conditions will be carried over to the proposed PTO with the following notes:

The term "gas-tight" is used in ATC conditions #2 and 10. Although the term "gas-tight" has been replaced by "leak-free," since these conditions are Rule 2201-based, and a definition of "gas-tight" is included in the permit, no change to the ATC conditions will be made.

Condition #26 requires concurrent implementation of ATC S-1548-144-35. This condition is satisfied by this Minor Modification project, which will incorporate both ATC S-1548-144-35 and '-501-0 into the Title V permit. Therefore, this condition may be removed.

There is no condition on the ATC requiring that records be retained for five years; however, since the facility-wide permit S-1548-0-3 already has the standard five-year record retention requirement (condition #109), it was deemed unnecessary to add this to Permit to Operate S-1548-501-1.

VII. COMPLIANCE

In accordance with Rule 2520, Section 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. 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
    b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. 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 11.4 by including:

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

A. Proposed Modified Title V Operating Permits
B. Authority to Construct Permits
C. Emissions Increases
D. Application
E. Previous Title V Operating Permit

Attachment A

Proposed Modified Title V Operating Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-144-40 **EXPIRATION DATE:** 05/31/2006

SECTION: NW20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
12,000 BBL FIXED ROOF CLARIFIER TANK 201A W/VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) & PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP

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PERMIT UNIT REQUIREMENTS

1. Tank shall vent only to vapor control system listed below. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Vapor control system shall consist of vapor piping from vessels and tanks S-1548-144, '-145, '-146, '-147, '-148, '-149, '-418, '-419, '-428, '-429, '-439, '-440, '-441, '-442, '-463, '-476, '-478 through '-484, '-486, '-487, '-488, '-489, '-497, '-498, and '-501. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Except during maintenance activities and power outages, operator shall continuously monitor the discharge pressure of the vapor recovery system to ensure its proper operation. The monitoring system shall be programmed to alarm the operator when the discharge pressure increases to where the flare activates. [District NSR Rule and 40 CFR 60.113b(c)(1)(ii)] Federally Enforceable Through Title V Permit
4. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control systems. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the district. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The vapor control system shall be capable of reducing VOC emissions by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Total VOC emission rate from S-1548-144 (excluding the flare and LOTS pressure vessels), S-1548-145, S-1548-146, S-1548-147, S-1548-148, S-1548-149, S-1548-428, S-1548-429, S-1548-439, S-1548-440, S-1548-441, and S-1548-442 shall not exceed 161.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Collected vapors shall be compressed to the field gas system or incinerated in the flare. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Flare shall be operated with a flame present at all times. Presence of a flame shall be monitored using a thermocouple or equivalent device. Kaldair Inc.'s KEP-100 Ignition System is an approved monitoring device. [District Rules 4001 and 4311] Federally Enforceable Through Title V Permit
11. Flare pilot fuel shall be LPG or natural gas with sulfur content less than 0.75 grains/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Records shall be maintained of all periods when the flare pilot flame is absent. [District Rule 1070 and 40CFR 60.115(d)(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.

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13. Semi-annual reports of all periods without the presence of a flare pilot flame shall be furnished to the District Compliance Division and EPA. [District Rule 4001, 40CFR 60.115b(d)(3)] Federally Enforceable Through Title V Permit

14. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [District NSR Rule and District Rule 4001] Federally Enforceable Through Title V Permit

15. Flare shall be equipped with flare gas volume flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit

16. Net heating value of the gas being combusted by flare shall be 300 Btu/scf or greater. [District Rules 4001 and 4311] Federally Enforceable Through Title V Permit

17. Total sulfur concentration of gas incinerated in flare shall not exceed 2000 ppmv. [District NSR Rule and District Rule 4801] Federally Enforceable Through Title V Permit

18. Amount of gas combusted shall not exceed any of the following: 5,000,000 scf/day, 25 MMscf/quarter, 100 MMscf/year. [District NSR Rule] Federally Enforceable Through Title V Permit

19. Emissions from the flare shall not exceed any of the following (based on total gas combusted): PM-10: 0.008 lb/MMBtu; NOx (as NO2): 0.068 lb/MMBtu; VOC: 0.063 lb/MMBtu; or CO: 0.37 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit

20. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District NSR Rule and District Rule 4801] Federally Enforceable Through Title V Permit

21. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted. Such records shall be retained for a period of five years and made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

22. A trained observer, as defined in EPA Method 22, shall check visible emissions at least once annually for a period of 15 minutes. If visible emissions are detected at any time during this period, the observation period shall be extended to two hours. A record containing the results of these observations shall be maintained, which also includes company name, process unit, observer's name and affiliation, date, estimated wind speed and direction, sky condition, and the observer's location relative to the source and sun. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

23. The vapor control system shall be maintained in a leak-free condition. [District Rule 4623, 5.6 and 40CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

24. This tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit

25. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

26. All piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

27. At least once per year, operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

29. For components belonging to the tank (i.e. attached to the tank and up to the point where it connects to the trunk line of the vapor control system), a gas leak is defined as a VOC concentration of greater than 10,000 ppmv above background measured in accordance with EPA Method 21. [District Rule 4623] Federally Enforceable Through Title V Permit

30. For the components belonging to the tank vapor control system, a gas leak is defined as a VOC concentration of greater than 500 ppmv above background measured in accordance with EPA Method 21. The vapor control system components consist of the hard-piping, ductwork, connections, and flow-inducing devices that transport gas or vapor from the tanks to the flare. [40CFR 60.112b(a)(3)(i) and 40CFR 60.481] Federally Enforceable Through Title V Permit

31. A gas leak discovered on the tank vapor control system shall be recorded and reported as a violation of NSPS Subpart Kb, 40CFR 60.112b(a)(3)(i). [40CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

32. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

33. Upon detection of a gas leak, the operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

34. Leaking components belonging to the tank that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components belonging to the tank discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

35. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

36. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

37. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070]

38. The control efficiency of any VOC destruction device, measured and calculated as carbon, shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. The operator shall ensure that the vapor recovery system is functional and is operating in compliance with permit conditions at all times. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-501-1 **EXPIRATION DATE:** 05/31/2006

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EQUIPMENT DESCRIPTION:
55,000 GALLON (12 FT DIAMETER X 65 FT LENGTH) FREE WATER KNOCKOUT VESSEL V-201H WITH VAPOR CONTROL AS DESCRIBED IN S-1548-144 (DEHY 20)

PERMIT UNIT REQUIREMENTS

1. The vessel and APCO-approved vapor control system, including piping, valves, and fittings, shall be maintained gas-tight, except during periods of vessel cleaning. [District Rules 2201and 2520] Federally Enforceable Through Title V Permit
2. Vessel shall be designed and maintained to vent only to the gas gathering system or the flare (S-1547-144), except during periods of vessel cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The FWKO shall be equiped with a control valve on its vapor-out line which shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessel. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Except during periods of vapor control system maintenance, and tank cleaning, vapor collection system shall operate with a minimum efficiency of 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 0.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All components attached to this vessel shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid, light oil and heavy oil. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All piping, valves and fittings associated with this vessel shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane with an instrument calibrated with methane. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. All components containing VOCs shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type 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 Rules 2201 and 4409] Federally Enforceable Through Title V Permit

11. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired 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 permit. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit

12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 4409] Federally Enforceable Through Title V Permit

13. 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 Rules 2201 and 4409] Federally Enforceable Through Title V Permit

14. Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit

15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

16. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

17. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

18. Permittee shall notify the District Compliance Division at least 72 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit

19. Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) Prior to venting the tank to the atmosphere, operate the tank vapor recovery system/vapor control device for at least 24 hours such that it collects the tank vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil tank by restricting the outflow of water, such that 90% of the tank volume is displaced; or 3) Vent the tank to a vapor control device/vapor recovery system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V = tank volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

20. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit

21. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Upon reintroducing crude oil/water to the tank, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit

23. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

24. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

DRAFT

Attachment B

Authority to Construct Permits

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-144-35 **ISSUANCE DATE:** 05/14/2007

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

LOCATION: LIGHT OIL WESTERN
CA

SECTION: NW20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 12,000 BBL FIXED ROOF CLARIFIER TANK 201A W/VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT (S) & PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP: CONNECT FREE WATER KNOCKOUT VESSEL S-1548-501 TO VAPOR CONTROL SYSTEM

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control system listed below. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Vapor control system shall consist of vapor piping from vessels and tanks S-1548-144, '-145, '-146, '-147, '-148, '-149, '-418, '-419, '-428, '-429, '-439, '-440, '-441, '-442, '-463, '-476, '-478 through '-490, and '-498. [District NSR Rule]
4. Except during maintenance activities and power outages, operator shall continuously monitor the discharge pressure of the vapor recovery system to ensure its proper operation. The monitoring system shall be programmed to alarm the operator when the discharge pressure increases to where the flare activates. [District Rule 2201 and 40 CFR 60.113b(c)(1)(ii)]
5. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control systems. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the district. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 326-6900 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

DAVID WARNER, Director of Permit Services
S-1548-144-35 · May 14 2007 2:07PM -- KLEVANNO · Joint Inspection NOT Required

7. The vapor control system shall be capable of reducing VOC emissions by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Total VOC emission rate from S-1548-144 (excluding the flare and LOTS pressure vessels), S-1548-145, S-1548-146, S-1548-147, S-1548-148, S-1548-149, S-1548-428, S-1548-429, S-1548-439, S-1548-440, S-1548-441, S-1548-442, and S-1548-501 shall not exceed 161.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

9. The tank shall be equipped with a fixed roof with no holes or openings [District NSR Rule] Federally Enforceable Through Title V Permit

10. Collected vapors shall be compressed to the field gas system or incinerated in the flare. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Flare shall be operated with a flame present at all times. Presence of a flame shall be monitored using a thermocouple or equivalent device. Kaldair Inc.'s KEP-100 Ignition System is an approved monitoring device. [District Rule 4001 and 4311]

12. Flare pilot fuel shall be LPG or natural gas with sulfur content less than 0.75 grains/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit

13. Records shall be maintained of all periods when the flare pilot flame is absent. [District Rule 40CFR 60.115(d)(2)]

14. Semi-annual reports of all periods without the presence of a flare pilot flame shall be furnished to the District Compliance Division and EPA. [District Rule 4001 40CFR 60.115b(d)(3)] Federally Enforceable Through Title V Permit

15. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [District Rules 2201 and 4001]

16. Flare shall be equipped with flare gas volume flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Net heating value of the gas being combusted by flare shall be 300 Btu/scf or greater. [District Rule 4001 and 4311]

18. Total sulfur concentration of gas incinerated in flare shall not exceed 2000 ppmv. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit

19. Maximum amount of gas combusted shall not exceed any of the following: 5,000,000 scf/day, 25 MMscf/quarter, 100 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Emissions from the flare shall not exceed any of the following (based on total gas combusted): PM-10: 0.008 lb/MMBtu; NOx (as NO2): 0.068 lb/MMBtu; VOC: 0.063 lb/MMBtu; or CO: 0.37 lb/MMBtu. [District Rule 2201]

21. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit

22. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted. Such records shall be retained for a period of five years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

23. A trained observer, as defined in EPA Method 22, shall check visible emissions at least once annually for a period of 15 minutes. If visible emissions are detected at any time during this period, the observation period shall be extended to two hours. A record containing the results of these observations shall be maintained, which also includes company name, process unit, observer's name and affiliation, date, estimated wind speed and direction, sky condition, and the observer's location relative to the source and sun. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

24. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system 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. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

25. A leak is defined as a reading in excess of 500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA test Method 21. [40 CFR 60.112b(a)(3)(i)]]

26. If any of the vapor control system components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)]]

27. Upon detection of any leaks >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane, the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to eliminate the leak shall exceed 56 hours after detection. [District Rule 4623]

28. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit

29. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit

30. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit

31. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 1070, 2201, and 2520, 9.3.2] Federally Enforceable Through Title V Permit

32. The control efficiency of any VOC destruction device, measured and calculated as carbon, shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit

33. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or as approved by District Rule 4623. [District Rule 4623, 6.4.7] Federally Enforceable Through Title V Permit

34. The operator shall ensure that the vapor recovery system is functional and is operating in compliance with permit conditions at all times. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

35. Within 180 days of initial startup of ATC S-1548-498-0, a report for the flare shall be submitted to the EPA and the District. The report shall contain: A) visible emission evaluation results; B) net heating value of gas combusted determined per 40 CFR 60.18(f)(3); C) actual exit velocity determined per 40 CFR 60.18 (f)(4); and D) maximum permitted velocity, Vmax, determined per 40 CFR 60.18(f)(6). [40 CFR 60.115b(d]

36. Authorities to Construct S-1548-144-23, -144-24, -144-25, -144-26, -144-27, -144-29, -144-30, -144-31, and -144-33 shall be implemented prior to or concurrently with this Authority to Construct. [District Rule 2201]

37. This Authority to Construct shall be implemented concurrently with ATC S-1548-501-0. [District Rule 2201]

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-501-0 **ISSUANCE DATE:** 05/14/2007

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

LOCATION: LIGHT OIL WESTERN
CA

EQUIPMENT DESCRIPTION:
55,000 GALLON (12 FT DIAMETER X 65 FT LENGTH) FREE WATER KNOCKOUT VESSEL V-201H WITH VAPOR CONTROL AS DESCRIBED IN S-1548-144 (DEHY 20)

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The vessel and APCO-approved vapor control system, including piping, valves, and fittings, shall be maintained gas-tight, except during periods of vessel cleaning. [District Rule 2201& 2520] Federally Enforceable Through Title V Permit
3. Vessel shall be designed and maintained to vent only to the gas gathering system or the flare (S-1547-144), except during periods of vessel cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The FWKO shall be equiped with a control valve on its vapor-out line which shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessel. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except during periods of vapor control system maintenance, and tank cleaning, vapor collection system shall operate with a minimum efficiency of 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
6. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 0.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 326-6900 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

DAVID WARNER, Director of Permit Services
S-1548-501-0 : May 14 2007 2:07PM -- KLEVANND : Joint Inspection NOT Required

7. All components attached to this vessel shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid, light oil and heavy oil. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit

9. Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit

10. All piping, valves and fittings associated with this vessel shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane with an instrument calibrated with methane. Emissions in excess of this limit shall be considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit

11. All components containing VOCs shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type 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 Rules 2201 and 4409] Federally Enforceable Through Title V Permit

12. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired 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 permit. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit

13. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 4409] Federally Enforceable Through Title V Permit

14. 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 Rules 2201 and 4409] Federally Enforceable Through Title V Permit

15. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

16. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit

17. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

18. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit

19. Permittee shall notify the District Compliance Division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) Prior to venting the tank to the atmosphere, operate the tank vapor recovery system/vapor control device for at least 24 hours such that it collects the tank vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil tank by restricting the outflow of water, such that 90% of the tank volume is displaced; or 3) Vent the tank to a vapor control device/vapor recovery system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V = tank volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

21. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit

22. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit

23. Upon reintroducing crude oil/water to the tank, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit

24. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

25. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

26. ATC S-1548-144-35 and this ATC shall be implemented concurrently. [District Rule 2201]

Attachment C

Emissions Increases

ATC	ATC Project #	Stationary Source Increase in Permitted Emissions (SSIPE) (lb/yr)				
		NOx	VOC	CO	SOx	PM10
S-1548-144-25	S-1065046	0	0	0	0	0
S-1548-501-0		0	146	0	0	0
SSIPE		**0**	**146**	**0**	**0**	**0**

Attachment D

Application

AERA

Received

MAY 0 8 2008

Permits Svc
SJVAPCD

May 1, 2008

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

RE: S-1548 Title V Minor Modification Application
Section 20 Dehydration Facility

Dear Mr. Sheikh:

The Section 20 Dehydration Facility (Dehy 20) processes light crude oil from the Belridge Oil Field. As a result of Project #S-1065046, Aera Energy LLC (Aera) was issued Authorities to Construct (ATC) to install a new free water knockout vessel at Dehy 20. Aera is in the final stages of construction and expects to place the vessel in service next month. Accordingly, Aera is requesting that ATCs #S-1548-144-35 and S-1548-501-0 be converted to Permits to Operate (PTO). In support of this request, attached are the completed application form, compliance certification form, and copies of the Authorities to Construct.

Should you have any questions, please feel free to contact me at (661) 665-7424.

Sincerely,

John E. Haley
Environmental Engineer
Belridge Producing Complex

2007 10th Anniversary

Aera Energy LLC • 10000 Ming Avenue • P.O. Box 11164 • Bakersfield, CA 93389-1164 • (661) 665-5000 • Fax (661) 665-5065

San Joaquin Valley
Unified Air Pollution Control District

Received

MAY 0 8 2008

Permit Services
SJVAPCD

APPLICATION FOR TITLE V MODIFICATION:

[ ] ADMINISTRATIVE AMENDMENT
[X] MINOR MODIFICATION
[ ] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Aera Energy LLC

2. MAILING ADDRESS:
STREET/P.O. BOX: P.O. Box 11164
CITY: Bakersfield STATE: CA 9-DIGIT ZIP CODE: 93389-1164

3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
STREET: Light Oil Western Stationary Source
CITY:
NW 1/4 SECTION 20 TOWNSHIP 28S RANGE 21E

INSTALLATION DATE:

4. GENERAL NATURE OF BUSINESS: Oil and Natural Gas Production

5. EQUIPMENT FOR WHICH APPLICATION IS MADE (Include Permit Nos.):

Implement Authorities to Construct #S-1548-144-35 and S-1548-501-0 into the Title V permit for the Light Oil Western Stationary Source.

(Use additional sheets if necessary)

6. DO YOU REQUEST A CERTIFICATE OF CONFORMITY WITH THIS ACTION? [ ] YES [X] NO

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

8. SIGNATURE OF APPLICANT/CONTACT PERSON: [signature]

TYPE OR PRINT TITLE OF APPLICANT: Environmental Engineer

9. TYPE OR PRINT NAME OF APPLICANT/CONTACT: John E. Haley

DATE: 5/1/08

10. FAX NUMBER: (661) 665-7437

TELEPHONE NUMBER: (661) 665-7424

FOR APCD USE ONLY:

DATE STAMP	FILING FEE RECEIVED: $ Ø / DATE PAID: _____ PROJECT NO.: S-1082245 FACILITY REGION & ID: S-1548

San Joaquin Valley
Unified Air Pollution Control District

TITLE V COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

[ ] SIGNIFICANT PERMIT MODIFICATION
[X] MINOR PERMIT MODIFICATION
[ ] ADMINISTRATIVE AMENDMENT

COMPANY NAME: Aera Energy LLC	FACILITY ID: S-1548
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 each circle for confirmation):

EP Based on information and belief formed after reasonable inquiry, the emission units identified in this application will continue to comply with the applicable federal requirement(s) which the emission units are in compliance.

EP Based on information and belief formed after reasonable inquiry, the emission units identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.

EP Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

EP 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:

EE Patt

Signature of Responsible Official

5-5-08

Date

E.E. Patterson

Name of Responsible Official (please print)

Process Supervisor

Title of Responsible Official (please print)

Attachment E

Previous Title V Operating Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1548-144-39 **EXPIRATION DATE:** 05/31/2006

SECTION: NW20 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
12,000 BBL FIXED ROOF CLARIFIER TANK 201A W/VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT (S) & PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP (DEHY 20)

PERMIT UNIT REQUIREMENTS

1. Tank shall vent only to vapor control system listed below. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Vapor control system shall consist of vapor piping from vessels and tanks S-1548-144, '-145, '-146, '-147, '-148, '-149, '-418, '-419, '-428, '-429, '-439, '-440, '-441, '-442, '-463, '-476, '-478 through '-484, '-486, '-487, '-488, '-489, '-497, and '-498. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Except during maintenance activities and power outages, operator shall continuously monitor the discharge pressure of the vapor recovery system to ensure its proper operation. The monitoring system shall be programmed to alarm the operator when the discharge pressure increases to where the flare activates. [District NSR Rule and 40 CFR 60.113b(c)(1)(ii)] Federally Enforceable Through Title V Permit
4. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control systems. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the district. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The vapor control system shall be capable of reducing VOC emissions by at least 99% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Total VOC emission rate from S-1548-144 (excluding the flare and LOTS pressure vessels), S-1548-145, S-1548-146, S-1548-147, S-1548-148, S-1548-149, S-1548-428, S-1548-429, S-1548-439, S-1548-440, S-1548-441, and S-1548-442 shall not exceed 161.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Collected vapors shall be compressed to the field gas system or incinerated in the flare. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Flare shall be operated with a flame present at all times. Presence of a flame shall be monitored using a thermocouple or equivalent device. Kaldair Inc.'s KEP-100 Ignition System is an approved monitoring device. [District Rules 4001 and 4311] Federally Enforceable Through Title V Permit
11. Flare pilot fuel shall be LPG or natural gas with sulfur content less than 0.75 grains/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Records shall be maintained of all periods when the flare pilot flame is absent. [District Rule 1070 and 40CFR 60.115(d)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Semi-annual reports of all periods without the presence of a flare pilot flame shall be furnished to the District Compliance Division and EPA. [District Rule 4001, 40CFR 60.115b(d)(3)] Federally Enforceable Through Title V Permit

14. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [District NSR Rule and District Rule 4001] Federally Enforceable Through Title V Permit

15. Flare shall be equipped with flare gas volume flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit

16. Net heating value of the gas being combusted by flare shall be 300 Btu/scf or greater. [District Rules 4001 and 4311] Federally Enforceable Through Title V Permit

17. Total sulfur concentration of gas incinerated in flare shall not exceed 2000 ppmv. [District NSR Rule and District Rule 4801] Federally Enforceable Through Title V Permit

18. Maximum amount of gas combusted shall not exceed any of the following: 5,000,000 scf/day, 25 MMscf/quarter, 100 MMscf/year. [District NSR Rule] Federally Enforceable Through Title V Permit

19. Emissions from the flare shall not exceed any of the following (based on total gas combusted): PM-10: 0.008 lb/MMBtu; NOx (as NO2): 0.068 lb/MMBtu; VOC: 0.063 lb/MMBtu; or CO: 0.37 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit

20. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District NSR Rule and District Rule 4801] Federally Enforceable Through Title V Permit

21. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted. Such records shall be retained for a period of five years and made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

22. A trained observer, as defined in EPA Method 22, shall check visible emissions at least once annually for a period of 15 minutes. If visible emissions are detected at any time during this period, the observation period shall be extended to two hours. A record containing the results of these observations shall be maintained, which also includes company name, process unit, observer's name and affiliation, date, estimated wind speed and direction, sky condition, and the observer's location relative to the source and sun. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

23. The vapor control system shall be maintained in a leak-free condition. [District Rule 4623, 5.6 and 40CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

24. This tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit

25. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

26. All piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

27. At least once per year, operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

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28. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

29. For components belonging to the tank (i.e. attached to the tank and up to the point where it connects to the trunk line of the vapor control system), a gas leak is defined as a VOC concentration of greater than 10,000 ppmv above background measured in accordance with EPA Method 21. [District Rule 4623] Federally Enforceable Through Title V Permit

30. For the components belonging to the tank vapor control system, a gas leak is defined as a VOC concentration of greater than 500 ppmv above background measured in accordance with EPA Method 21. The vapor control system components consist of the hard-piping, ductwork, connections, and flow-inducing devices that transport gas or vapor from the tanks to the flare. [40CFR 60.112b(a)(3)(i) and 40CFR 60.481] Federally Enforceable Through Title V Permit

31. A gas leak discovered on the tank vapor control system shall be recorded and reported as a violation of NSPS Subpart Kb, 40CFR 60.112b(a)(3)(i). [40CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

32. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

33. Upon detection of a gas leak, the operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

34. Leaking components belonging to the tank that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components belonging to the tank discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

35. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

36. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

37. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070]

38. The control efficiency of any VOC destruction device, measured and calculated as carbon, shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit

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39. The operator shall ensure that the vapor recovery system is functional and is operating in compliance with permit conditions at all times. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit