



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

MAR 13 2014

Brent Winn
Aera Energy, LLC
PO Box 11164
Bakersfield, CA 93389

Re: Notice of Preliminary Decision – Emission Reduction Credits
Facility Number: S-43
Project Number: S-1122749

Dear Mr. Winn:

Enclosed for your review and comment is the District's analysis of Aera Energy, LLC's application for Emission Reduction Credits (ERCs) resulting from the shutdown of six natural gas compressor engines and one oil heater, at the Lost Hills Section 15P Gas Plant near Lost Hills, CA. The quantity of ERCs proposed for banking is 12,003 metric tons CO₂e/yr.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice comment period, the District intends to issue the ERCs. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Steve Roeder of Permit Services at (661) 392- 5615.

Sincerely,

David Warner
Director of Permit Services

DW:SR/st

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Sayed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

**San Joaquin Valley Air Pollution Control District
ERC Application Review
Shutdown of Six Engines and One Oil Heater**

Facility Name: Aera Energy, LLC

Date: February 18, 2014

Mailing Address: PO Box 11164
Bakersfield, CA 93389

Engineer: Steve Roeder
Lead Engineer: Allan Phillips

Contact Person: Brent Winn @ (661) 665-4363

Facility ID: S-43

Project #: S-1122749

Submitted: July 16, 2012

Deemed Complete: July 18, 2012

I. Summary

The primary business of Aera is the production of oil and natural gas.

Aera had previously shut down their Lost Hills Section 15 Gas Plant including 6 compressor engines (S-43-4, -5, -6, -7, -8 and -9) and one oil heater (S-43-15). The permits have been surrendered and the equipment has all been sold and removed.

Aera has banked the criteria emission reductions (NO_x, SO_x, PM₁₀, CO and VOC) from the shutdown of the engines (ERC Project S-1075362) and the oil heater (ERC Project S-1080067) and has proposed to bank the reductions in greenhouse gasses (GHG) from the shutdowns in this project. See the surrendered permits in Appendix A.

The following emission reductions qualify for banking.

Bankable GHG ERCs (metric tons/year)	
GHG	12,003

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 2301 Emission Reduction Credit Banking (1/19/12)

III. Location of Reduction

The engines and oil heater were located at the Lost Hills Section 15 Gas Plant located in NE Section 15, Township 27S, Range 21E in Lost Hills.

IV. Method of Generating Reductions

The method of emission reductions is the permanent shutdown of 6 (three 1,100 hp and three 826 hp) lean burn natural gas-fired IC engines driving Section 15 Gas Plant Compressors (S-43-4 through -9) and one 5 MMBtu/hr natural gas-fired oil heater (S-43-15).

All permits were surrendered on August 27, 2007, the equipment was sold and removed from site, and no other engines or electric motors are being used to compress the gas. According to the applicant, the Lost Hills Section 15 Gas Plant was shut down due to declining gas production in the fields surrounding the plant.

V. Calculations

A. Assumptions

- Units of GHG AER is metric tons of CO₂e per year, rounded to the nearest metric ton
- 1,000 kg = 1 metric ton
- The final CO₂e emission factor from the combustion of natural gas includes GHG emissions of CO₂, CH₄ and N₂O, where the total emission factor includes the summation of each of the compounds multiplied by their Global Warming Potential (GWP)
- The emission factors are from the District's Spreadsheet: ARB GHG Emission Factors
- Monthly fuel use records have been provided by the applicant
- Annual emissions are based on fuel usage and the CO₂e emission factor
- The HHV for the engine gas is taken from a field gas analysis as presented in Project S-1075362 and is 1,106 Btu/scf
- The HHV for the oil heater gas is taken from a field gas analysis as presented in Project S-1080067 and is 1,130 Btu/scf

B. Emission Factors

The CO₂e emission factor is taken from the District's Spreadsheet "ARB – Greenhouse Gas Emission Factors" and is calculated in lb/MMBtu to three significant figures in the following table.

Natural Gas Emission Factors					
Pollutant	kg/MMBtu x	2.205 lb/kg x	GWP =	CO ₂ e EF	
CO ₂	52.87	2.205	1.00	116.578	lb/MMBtu
CH ₄	0.0009	2.205	21.00	0.0417	lb/MMBtu
N ₂ O	0.0001	2.205	310.0	0.0684	lb/MMBtu
Total CO ₂ e				117	lb/MMBtu

C. Baseline Period Determination

Pursuant to Rule 2201, the Baseline Period is a period of time equal to either:

The two consecutive years of operation immediately prior to the submission date of the Complete Application; or
At least two consecutive years within the five years immediately prior to the submission date of the Complete Application if determined by the APCO as more representative of normal source operation.

The baseline period for the engines and the oil heater have been previously determined by the District during ERC Projects S-1075362 and S-1080067. The same baseline periods will be used for this project as follows.

1. Engines

The time period from 4th Quarter 2002 through 3rd Quarter 2004 was selected as the baseline period for the engines.

2. Oil Heater

The time period from 1st Quarter 2003 through 4th Quarter 2004 (excluding January 2003) was selected as the baseline period.

D. Baseline Data

1. Engine Baseline Data

The baseline fuel-use is taken from the annual fuel-use records that have been supplied by the applicant, as evaluated in ERC projects S-1075362 and S-1080067.

The monthly fuel-use for each engine is combined into total fuel-use for all-engines-combined in Appendix B.

The fuel use is combined into two-year monthly totals, then divided into the single-year monthly average, and finally the grand annual average fuel-use in the following table.

Monthly Baseline Fuel-Use in 1,000 SCF					
Month	2002	2003	2004	Monthly	Monthly
Jan		16,944	13,636	30,580	15,290
Feb		15,122	13,342	28,464	14,232
Mar		16,500	13,539	30,039	15,020
Apr		14,729	11,932	26,661	13,331
May		16,630	7,477	24,107	12,054
Jun		15,631	7,791	23,422	11,711
Jul		15,626	9,174	24,800	12,400
Aug		16,089	9,396	25,485	12,743
Sep		15,280	8,536	23,816	11,908
Oct	16,336	17,148		33,484	16,742
Nov	15,550	16,713		32,263	16,132
Dec	16,207	16,217		32,424	16,212
Grand Annual Average Fuel Use					167,775

2. Oil Heater Baseline Data

The monthly oil heater fuel-use data is taken from project S-1080067 and is combined into an annual average total in the following table.

Monthly Baseline Fuel-Use in 1,000 SCF				
Month	2003	2004	Monthly Total	Monthly Average
Jan	3,188	3,253	6,441	3,221
Feb	2,794	3,148	5,942	2,971
Mar	3,032	3,197	6,229	3,115
Apr	2,759	3,159	5,918	2,959
May	3,136	3,115	6,251	3,126
Jun	2,742	2,614	5,356	2,678
Jul	2,651	3,000	5,651	2,826
Aug	2,756	3,124	5,880	2,940
Sep	2,615	3,083	5,698	2,849
Oct	2,725	3,188	5,913	2,957
Nov	2,833	3,420	6,253	3,127
Dec	2,971	3,371	6,342	3,171
Grand Annual Average Fuel Use				35,940

E. Historical Actual Emissions (HAE)

1. Engines

The GHG HAE for the engines are determined by multiplying the annual fuel-use by the emission factor presented above, and is expressed in metric tons per year.

$$HAE = \frac{167,775 \text{ Mscf}}{\text{yr}} \times \frac{1,106 \text{ Btu}}{\text{scf}} \times \frac{117 \text{ lb} \cdot \text{CO}_2\text{e}}{\text{MMBtu}} \times \frac{1 \text{ metric ton}}{2,204.6 \text{ lb}} = 9,848 \frac{\text{metric tons}}{\text{year}}$$

2. Oil Heater

$$HAE = \frac{35,940 \text{ Mscf}}{\text{yr}} \times \frac{1,130 \text{ Btu}}{\text{scf}} \times \frac{117 \text{ lb} \cdot \text{CO}_2\text{e}}{\text{MMBtu}} \times \frac{1 \text{ metric ton}}{2,204.6 \text{ lb}} = 2,155 \frac{\text{metric tons}}{\text{year}}$$

3. Total

Total HAE for CO₂e is:

Total HAE for CO ₂ e (Metric Tons per Year)	
Engines	9,848
Oil Heater	2,155
Total	12,003

VI. Compliance

Rule 2201 - New and Modified Stationary Source Review Rule

The applicant has proposed to bank ERCs for GHG. Rule 2201 provides requirements for banking the criteria pollutants, which has already been done in ERC projects S-1075362 and S-1080067. There are no additional applicable requirements from Rule 2201.

Rule 2301 – Emission Reduction Credit Banking

Regarding GHG, the purpose of this Rule is to:

- 1.2.1 Provide an administrative mechanism for sources to bank voluntary greenhouse gas emission reductions for later use.
- 1.2.2 Provide an administrative mechanism for sources to transfer banked greenhouse gas emission reductions to others for any use.
- 1.2.3 Define eligibility standards, quantitative procedures and administrative practices to ensure that banked greenhouse gas emission reductions are real, permanent, quantifiable, surplus, and enforceable.

Section 4.5 specifies eligibility criteria for GHG emission reductions to qualify for banking. Below is a summary of each criteria and a description of how the emission reductions satisfy the criteria.

Section 4.5.1 requires that the emission reduction must have occurred after 1/1/05.

The emission reductions occurred when all permits were surrendered in 2007, the equipment was sold and removed from site, and no other engines or electric motors are being used to compress the gas. Therefore, this criteria has been satisfied.

Section 4.5.2 requires that the emissions must have occurred in the District.

The emissions occurred at the Lost Hills Section 15 Gas Plant located in NE Section 15, Township 27S, Range 21E in Lost Hills. Since this location is within the District, this criteria has been satisfied.

Section 4.5.3 requires that the emission reductions must be real, surplus, permanent, quantifiable, and enforceable.

Real:

The emissions reductions were generated by the shutdown of six engines and one oil heater. The emissions were calculated from actual historic fuel-use data and recognized emission factors and source test data, therefore the emissions were real. The equipment has been removed. Therefore, the emission reductions are real.

Surplus:

Since the GHG emission reductions occurred in 2007, they were not subject to any Cap and Trade regulations on or after January 1, 2012. Therefore, the GHG emission reductions are surplus and satisfy the requirements of Section 4.5.3.1.

There are no laws, rules, regulations, agreements, orders, or permits requiring any GHG emission reductions from cotton gins. Therefore, the emission reductions satisfy the surplus requirement in Section 4.5.3.2.

Since the GHG emission reductions are not the result of an action taken by the permittee to comply with any requirement, the GHG emission reductions are surplus, additional of all requirements, and satisfy the surplus requirement in section 4.5.3.4.

Permanent:

AERA has ceased operation of the 6 IC engines and the hot oil heater and surrendered the permits. The equipment has been dismantled and removed from the facility, and there are no other engines or electric motors connected to compress any remaining gas. Since no emissions have been shifted, the reductions are permanent.

When determining the geographical boundary in which the emission reduction is determined to be permanent the applicant may consider how the GHG ERC may likely be used.

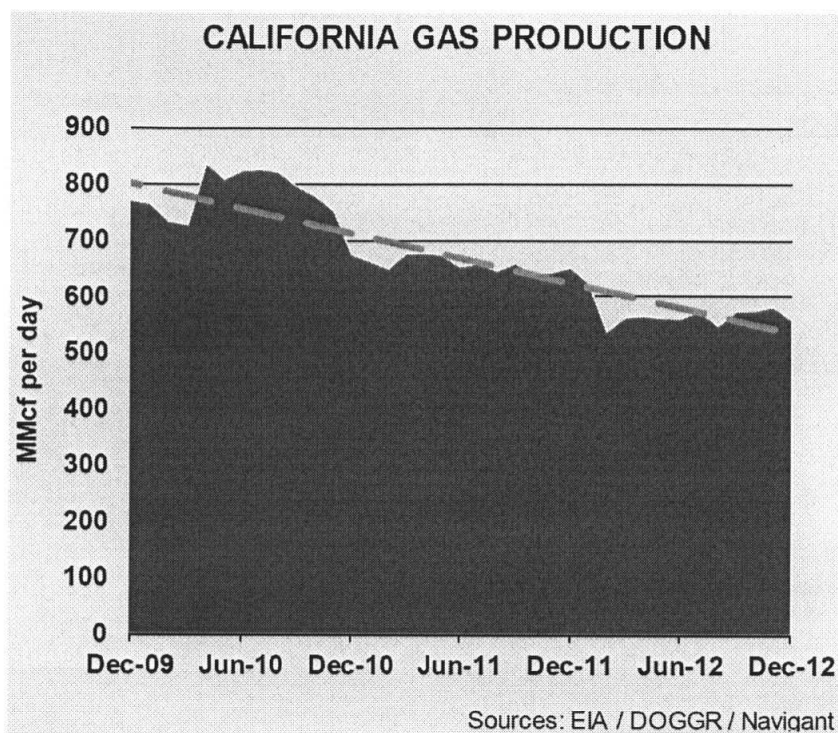
While Rule 2301 allows facilities to receive ERCs for GHG emission reductions, the District does not have any requirements regulating the use of GHG ERCs. However, it is anticipated that the likely uses of such GHG ERCs would be their future retirement as GHG mitigation in the CEQA process.

Pursuant to CEQA, lead agencies must consider the environmental impact of GHG emissions from a project and may require that such GHG emissions be mitigated. In evaluating various mitigation techniques, including the retirement of GHG ERCs, the lead agency must determine if the proposed mitigation technique adequately mitigates the projects GHG emission increase.

When a lead agency determines if the retirement of a particular GHG ERC provides adequate GHG mitigation for a project, the lead agency may choose to consider the location where the GHG ERC was generated and the geographical boundary used to determine the permanence of the emission reduction. Thus in making this determination, the lead agency may conclude that the retirement of a particular GHG ERC would provide adequate mitigation for projects within that same geographical boundary. Again, that determination will be made by the lead agency for a particular project.

This applicant has selected the State of California as the geographical boundary for which the emission reduction is permanent. Information has been provided below to validate this geographical boundary selection.

As shown in the following chart from the Division of Oil, Gas and Geothermal Resources (DOGGR), the total natural gas production in the State of California continues to decline. Gas Production has declined from 800,000,000 cubic feet per day in 12/09 to 550,000,000 cubic feet per day in 12/12.



Aera had six natural gas compressors serving the Lost Hills Plant, and due to a lack of gas to compress, all of the engines have been shut down and removed, and there are no other engines or electric motors compressing any of the remaining gas. Therefore there is no transfer of emissions to any other sources, and the emission reductions are permanent.

Based on this information, the geographical boundary for which the emission reduction is permanent is the State of California.

The ERC Certificate will include the following identifier:

"Shutdown of engines and oil heater verified as permanent within the State of California"

Quantifiable:

The actual emissions were calculated from historic fuel-use records and accepted emission factors. Therefore, the emission reductions are quantifiable and have been quantified.

Enforceable:

The engines and oil heater have been shut down and the PTOs have been surrendered to the District. Operation of the equipment without a valid permit would subject the permittee to enforcement action. Therefore, the emission reductions are enforceable.

Section 4.5.4 requires that GHG emission reductions be calculated as the difference between the historic annual average GHG emissions (as CO₂e) and the PE2 after the reduction is complete. The historical GHG emissions must be calculated using the consecutive 24 month period immediately prior to the date the emission reductions occurred, or another consecutive 24 month period in the 60 months prior to the date the emission reduction occurred if determined by the APCO as being more representative of normal operations.

The GHG emission reductions were calculated according to the baseline period identified above. Since this is a permanent shutdown of the compressor engines from a depleted natural gas field, with none of the load being shifted to any other compressor engines or electric motors in California, there is no post-project potential to emit GHG.

Section 4.5.5.5 requires that GHG emission reductions proposed to be quantified using CARB-approved emission reduction project protocols shall be calculated in accordance with the applicable protocol.

Since the GHG emission reductions are not subject to an applicable CARB-approved emission reduction project protocol, this section is not applicable.

Section 4.5.6 requires that ERCs shall be made enforceable through permit conditions or legally binding contract.

The compressor engines held a legal District operating permit. That permit has been surrendered to the District. Since the operation of a new engine would require a new Authority to Construct, as discussed above, the emission reduction is enforceable.

Section 5 identifies ERC Certificate application procedures.

Section 5.5.2 requires, for emission reductions occurring prior to 1/19/12, applications for ERCs must be submitted by 7/19/12.

The ERC application was submitted on 7/16/12, therefore the application is timely.

Section 6.15 specifies the registration requirements for GHG ERCs.

This emission reductions are surplus and additional of all requirements pursuant to Section 4.5.3.4. Therefore the ERC certificate shall include the following notation:

"This emission reduction is surplus and additional to all applicable regulatory requirements."

Compliance with Rule 2301 has been demonstrated and no adjustments are necessary.

VII. Recommendation

Issue the ERC Certificate in the amounts posted in the table below and on the attached Draft ERC Certificate.

Bankable GHG ERCs (metric tons/year)	
GHG	12,003

List of Appendixes

- A. Surrendered Permits to Operate
- B. Baseline Engine Fuel Use Chart
- C. Draft ERC Certificate

Appendix A Surrendered Permits to Operate

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-43-4-15

EXPIRATION DATE: 08/31/2009

SECTION: NE15 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,100 BHP PRECOMPRESSION OPERATION #1 INCLUDING SUPERIOR NATURAL GAS FIRED IC ENGINE AND SHARING WITH PERMITS S-43-5 AND '-6 INLET SEPARATORS (V28/V29), COMPRESSOR (C-2C), AIR COOLER (AC-6A), SCRUBBER (V-30A) AND MISCELLANEOUS VALVES AND FLANGES

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Upon 7 days written notice to the District this engine may be designated as a dormant emission unit or an active emission unit. [District Rule 1070] Federally Enforceable Through Title V Permit
3. When designated as a dormant emissions unit fuel supply line shall be physically disconnected from the emission unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Source testing is required within 60 days of recommencing operation if a source test has not been performed within the past 24 months. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
5. During non operation of this unit the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
6. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
7. Operation shall include lube oil head tank (V-26) and I.C. engine fuel scrubber (V-4) shared between permit unit #'s S-43-4, '-5, '-6, '-7, '-8, and '-9. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Fuel gas sulfur content shall not exceed 0.3 gr/dscf as H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Condensate from compressor scrubbers and inlet separators shall be piped to low-pressure condensate vessel of permit S-43-1 or to any tank at the Lost Hill I treating facility served by vapor collection and control system S-1548-120. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Distance piece vents shall be inspected and any packing leaks repaired in accordance with Rules 4403, as applicable. [District Rule 4403] Federally Enforceable Through Title V Permit
11. Pre-compressors with packing leaks shall be shut down within 72 hours and packing leaks repaired prior to re-starting. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081, 3.0] Federally Enforceable Through Title V Permit
13. PM-10 emission rate shall not exceed 0.10 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
14. SO₂ emission rate shall not exceed 0.01 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Oxides of nitrogen (as NO₂) emission rate shall not exceed 65 ppmv @ 15% O₂ and 53.5 lb/day. [District Rule 4701 and 4702] 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: LOST HILLS GAS PLANT, NE 16, T.27S, R.21E., M.D.B. & M., LOST HILLS, CA

S-43-4-15: Nov 10 2005 1:56PM - AITABEU

16. Volatile organic compounds (VOC's) emission rate shall not exceed 304 ppmv @ 15% O₂ and 87.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Carbon monoxide (CO) emission rate shall not exceed 463 ppmv @ 15% O₂ and 232.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
18. District-witnessed source testing for NO_x and CO emission rates shall be conducted using CARB Method 100, and District-witnessed source testing for VOC emission rates shall be conducted using EPA Method 25 or EPA Method 18, referenced as methane, not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Documentation of fuel gas sulfur content shall be submitted to District with source test results. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
21. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Rule 402 (Madera) and 404 (all 7 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
22. If the IC engine is fired on certified natural gas, then maintain on file copies of all natural gas bills or suppliers certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. If the engine is not fired on certified natural gas, then the sulfur content of the gas shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. The operator of an internal combustion (IC) engine 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
26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rules 406 (Fresno), 404 (Madera), 407 (Kern, Kings, San Joaquin, Stanislaus, Merced, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] 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.

29. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
32. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternate device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
33. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
35. All compressors associated with this permit unit shall be reciprocating compressors in wet gas service only. In wet gas service means that a piece of equipment contains or contacts the field gas before the extraction step in the process. [40 CFR 60.482-3(b), 60.633(f), 60.482-3(a), and 60.632(f)] Federally Enforceable Through Title V Permit
36. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
37. Records shall be kept of leaks from distance piece vents and compliance with required repair timelines pursuant to Rules 4403, as applicable. [District Rule 4403] Federally Enforceable Through Title V Permit
38. Records of inspections, repairs and maintenance of fugitive VOC sources shall be kept and made readily available for District inspection. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-43-5-14

EXPIRATION DATE: 08/31/2009

SECTION: NE15 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,100 BHP PRECOMPRESSION OPERATION #2 INCLUDING SUPERIOR NATURAL GAS FIRED IC ENGINE AND SHARING WITH PERMITS S-43-4 AND '6 INLET SEPARATORS (V28/V29), COMPRESSOR (C-2B), AIR COOLER (AC-6A), SCRUBBER (V-30A) AND MISCELLANEOUS VALVES AND FLANGES

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Upon 7 days written notice to the District this engine may be designated as a dormant emission unit or an active emission unit. [District Rule 1070]
3. When designated as a dormant emissions unit fuel supply line shall be physically disconnected from the emission unit. [District Rule 2080]
4. Source testing is required within 60 days of recommencing operation if a source test has not been performed within the past 24 months. [District Rules 2201, 4701, and 4702]
5. During non operation of this unit the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District Rules 2201, 4701, and 4702]
6. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201, 4701, and 4702]
7. Operation shall include lube oil head tank (V-26) and I.C. engine fuel scrubber (V-4) shared between permit unit #'s S-43-4, '5, '6, '7, '8, and '9. [District NSR Rule]
8. Fuel gas sulfur content shall not exceed 0.3 gr/dscf as H₂S. [District NSR Rule]
9. Condensate from compressor scrubbers and inlet separators shall be piped to low-pressure condensate vessel of permit S-43-1 or to any tank at the Lost Hill 1 treating facility served by vapor collection and control system S-1548-120. [District NSR Rule]
10. Distance piece vents shall be inspected and any packing leaks repaired in accordance with Rules 4403, as applicable. [District Rule 4403]
11. Pre-compressors with packing leaks shall be shut down within 72 hours and packing leaks repaired prior to re-starting. [District Rule 2201]
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081, 3.0]
13. PM-10 emission rate shall not exceed 0.10 lb/hr. [District NSR Rule]
14. SO₂ emission rate shall not exceed 0.01 lb/hr. [District NSR Rule]
15. Oxides of nitrogen (as NO₂) emission rate shall not exceed 65 ppmv @ 15% O₂ and 53.5 lb/day. [District Rules 4701 and 4702]
16. Volatile organic compounds (VOC's) emission rate shall not exceed 304 ppmv @ 15% O₂ and 87.1 lb/day. [District NSR Rule]

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: LOST HILLS GAS PLANT, NE 15, T.27S, R.21E., M.D.B. & M., LOST HILLS, CA
S-43-5-14: Jan 31 2007, 1:00PM - KEASTUD

17. Carbon monoxide (CO) emission rate shall not exceed 463 ppmv @ 15% O₂ and 232.6 lb/day. [District NSR Rule]
18. District-witnessed source testing for NO_x and CO emission rates shall be conducted using CARB Method 100, and District-witnessed source testing for VOC emission rates shall be conducted using EPA Method 25 or EPA Method 18, referenced as methane, not less than once every 24 months. [District NSR Rule]
19. Documentation of fuel gas sulfur content shall be submitted to District with source test results. [District NSR Rule]
20. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 4801]
21. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201]
22. If the IC engine is fired on certified natural gas, then maintain on file copies of all natural gas bills or suppliers certification of sulfur content. [District Rule 2080]
23. If the engine is not fired on certified natural gas, then the sulfur content of the gas shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2080]
24. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2080]
25. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2080]
26. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702]
27. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702]
28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702]
29. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702]

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

30. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternate device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. [District Rule 4702]
31. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702]
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
33. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702]
34. All compressors associated with this permit unit shall be reciprocating compressors in wet gas service only. In wet gas service means that a piece of equipment contains or contacts the field gas before the extraction step in the process. [40 CFR 60.482-3(b), 60.633(f), 60.482-3(a), and 60.632(f)]
35. Records shall be kept of leaks from distance piece vents and compliance with required repair timelines pursuant to Rules 4403, as applicable. [District Rule 4403]
36. Records of inspections, repairs and maintenance of fugitive VOC sources shall be kept and made readily available for District inspection. [District Rule 2080]

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

Facility Name: AERA ENERGY LLC
 Location: LOST HILLS GAS PLANT, NE 15, T.27S, R.21E., M.O.B. & M., LOST HILLS, CA
 S-43-5-14: Jan 31 2007 1:08PM - KEASTMD

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-43-6-14

EXPIRATION DATE: 08/31/2009

SECTION: NE15 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

1,100 BHP PRECOMPRESSION OPERATION #3 INCLUDING SUPERIOR NATURAL GAS IC ENGINE AND SHARING WITH PERMIT UNIT S-43-4 AND '-5 INLET SCRUBBERS (V28/V29), COMPRESSOR (C-2A), AIR COOLER (AC-6A), SCRUBBER (V-30A) AND MISCELLANEOUS VALVES AND FLANGES

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Upon 7 days written notice to the District this engine may be designated as a dormant emission unit or an active emission unit. [District Rule 1070]
3. When designated as a dormant emissions unit fuel supply line shall be physically disconnected from the emission unit. [District Rule 2080]
4. Source testing is required within 60 days of recommencing operation if a source test has not been performed within the past 24 months. [District Rules 2201, 4701, and 4702]
5. During non operation of this unit the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District Rules 2201, 4701, and 4702]
6. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201, 4701, and 4702]
7. Operation shall include lube oil head tank (V-26) and I.C. engine fuel scrubber (V-4) shared between permit unit #'s S-43-4, '-5, '-6, '-7, '-8, and '-9. [District NSR Rule]
8. Fuel gas sulfur content shall not exceed 0.3 gr/dscf as H₂S. [District NSR Rule]
9. Condensate from compressor scrubbers and inlet separators shall be piped to low-pressure condensate vessel of permit S-43-1 or to any tank at the Lost Hill 1 treating facility served by vapor collection and control system S-1548-120. [District NSR Rule]
10. Distance piece vents shall be inspected and any packing leaks repaired in accordance with Rules 4403, as applicable. [District Rule 4403]
11. Pre-compressors with packing leaks shall be shut down within 72 hours and packing leaks repaired prior to re-starting. [District Rule 2201]
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081, 3.0]
13. PM-10 emission rate shall not exceed 0.10 lb/hr. [District NSR Rule]
14. SO₂ emission rate shall not exceed 0.01 lb/hr. [District NSR Rule]
15. Oxides of nitrogen (as NO₂) emission rate shall not exceed 65 ppmv @ 15% O₂ and 53.5 lb/day. [District Rules 4701 and 4702]
16. Volatile organic compounds (VOC's) emission rate shall not exceed 304 ppmv @ 15% O₂ and 87.1 lb/day. [District NSR Rule]

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: LOST HILLS GAS PLANT, NE 15, T.27S, R.21E., M.D.B. & M., LOST HILLS, CA

S-43-6-14 : Jan 31 2007 1:08PM - KEASTMD

17. Carbon monoxide (CO) emission rate shall not exceed 463 ppmv @ 15% O₂ and 232.6 lb/day. [District NSR Rule]
18. District-witnessed source testing for NO_x and CO emission rates shall be conducted using CARB Method 100, and District-witnessed source testing for VOC emission rates shall be conducted using EPA Method 25 or EPA Method 18, referenced as methane, not less than once every 24 months. [District NSR Rule]
19. Documentation of fuel gas sulfur content shall be submitted to District with source test results. [District NSR Rule]
20. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 4801]
21. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201]
22. If the IC engine is fired on certified natural gas, then maintain on file copies of all natural gas bills or suppliers certification of sulfur content. [District Rule 2080]
23. If the engine is not fired on certified natural gas, then the sulfur content of the gas shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2080]
24. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2080]
25. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2080]
26. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702]
27. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702]
28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702]
29. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702]

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

30. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternate device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. [District Rule 4702]
31. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702]
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
33. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702]
34. All compressors associated with this permit unit shall be reciprocating compressors in wet gas service only. In wet gas service means that a piece of equipment contains or contacts the field gas before the extraction step in the process. [40 CFR 60.482-3(b), 60.633(f), 60.482-3(a), and 60.632(f)]
35. Records shall be kept of leaks from distance piece vents and compliance with required repair timelines pursuant to Rules 4403, as applicable. [District Rule 4403]
36. Records of inspections, repairs and maintenance of fugitive VOC sources shall be kept and made readily available for District inspection. [District Rule 2080]

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

Facility Name: AERA ENERGY LLC
 Location: LOST HILLS GAS PLANT, NE 15, T.27S, R.21E., M.D.B. & M., LOST HILLS, CA
 S-43-6-14 : Jan 31 2007 1:00 PM -- KEASTMD

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-43-7-11

EXPIRATION DATE: 08/31/2009

SECTION: NE15 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

825 BHP REFRIGERATION COMPRESSION UNIT #4 INCLUDING NATURAL GAS FIRED IC ENGINE AND SHARED W/ PERMIT UNITS S-43-8 & '9 SUCTION SCRUBBER (V-6), ECONOMIZER (V-7), SURGE TANK (V-9), COMPRESSOR (C-1C), OIL TRAP (V-10) & CONDENSERS (AC-1A, AC-1B, AC-1C)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Upon 7 days written notice to the District this engine may be designated as a dormant emission unit or an active emission unit. [District Rule 1070]
3. When designated as a dormant emissions unit fuel supply line shall be physically disconnected from the emission unit. [District Rule 2080]
4. Source testing is required within 60 days of recommencing operation if a source test has not been performed within the past 24 months. [District Rules 2201, 4701, and 4702]
5. During non operation of this unit the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District Rules 2201, 4701, and 4702]
6. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201, 4701, and 4702]
7. This engine shall not be operated after June 1, 2007 for any reason without an ATC including the Rule 4702 emissions limits and any necessary retrofits needed to comply with the applicable requirements of District Rule 4702. [District Rule 4702]
8. Operation shall include lube oil head tank (V-26) and I.C. engine fuel scrubber (V-4) shared between permit unit #'s S-43-4, '5, '6, '7, '8, and '9. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Compressor distance piece shall be vented to the vapor recovery system listed on PTO# S-43-3. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Fuel gas sulfur content shall not exceed 0.3 gr/dscf as H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Condensate from compressor scrubbers and inlet separators shall be piped to low-pressure condensate vessel of permit S-43-1 or to any tank at the Lost Hill 1 treating facility served by vapor collection and control system S-1548-120. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Records of inspections, repairs and maintenance of fugitive VOC sources shall be kept and made readily available for District inspection. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
13. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081, 3.0] Federally Enforceable Through Title V Permit
14. PM-10 emission rate shall not exceed 0.10 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
15. SO₂ emission rate shall not exceed 0.01 lb/hr. [District NSR Rule] 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.

16. Oxides of nitrogen (as NO₂) emission rate shall not exceed 65 ppmv @ 15% O₂ and 40.2 lb/day. [District Rule 4701] Federally Enforceable Through Title V Permit
17. Volatile organic compounds (VOC's) emission rate shall not exceed 304 ppmv @ 15% O₂ and 87.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Carbon monoxide (CO) emission rate shall not exceed 463 ppmv @ 15% O₂ and 232.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
19. District-witnessed source testing for NO_x and CO emission rates shall be conducted using CARB Method 100, and District-witnessed source testing for VOC emission rates shall be conducted using EPA Method 25 or EPA Method 18, referenced as methane, not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Documentation of fuel gas sulfur content shall be submitted to District with source test results. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Rule 402 (Madera) and 404 (all 7 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. If the IC engine is fired on certified natural gas, then maintain on file copies of all natural gas bills or suppliers certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. If the engine is not fired on certified natural gas, then the sulfur content of the gas shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. The operator of an internal combustion (IC) engine 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
27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rules 406 (Fresno), 404 (Madera), 407 (Kern, Kings, San Joaquin, Stanislaus, Merced, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
29. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702]

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

30. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702]
31. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702]
32. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702]
33. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternate device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
34. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702]
35. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
36. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-43-8-11

EXPIRATION DATE: 08/31/2009

SECTION: NE15 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

825 BHP REFRIGERATION COMPRESSION UNIT #5 INCLUDING NATURAL GAS FIRED IC ENGINE AND SHARED W/ PERMIT UNITS S-43-7 AND '9 SUCTION SCRUBBER (V-6), ECONOMIZER (V-7), SURGE TANK (V-9), COMPRESSOR (C-1B), OIL TRAP (V-10) & CONDENSERS (AC-1A, AC-1B, AC-1C)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Upon 7 days written notice to the District this engine may be designated as a dormant emission unit or an active emission unit. [District Rule 1070]
3. When designated as a dormant emissions unit fuel supply line shall be physically disconnected from the emission unit. [District Rule 2080]
4. Source testing is required within 60 days of recommencing operation if a source test has not been performed within the past 24 months. [District Rules 2201, 4701, and 4702]
5. During non operation of this unit the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District Rules 2201, 4701, and 4702]
6. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201, 4701, and 4702]
7. Operation shall include lube oil head tank (V-26) and I.C. engine fuel scrubber (V-4) shared between permit unit #'s S-43-4, '5, '6, '7, '8, and '9. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Compressor distance piece shall be vented to the vapor recovery system listed on PTO# S-43-3. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Fuel gas sulfur content shall not exceed 0.3 gr/dscf as H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Condensate from compressor scrubbers and inlet separators shall be piped to low-pressure condensate vessel of permit S-43-1 or to any tank at the Lost Hill 1 treating facility served by vapor collection and control system S-1548-120. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Records of inspections, repairs and maintenance of fugitive VOC sources shall be kept and made readily available for District inspection. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081, 3.0] Federally Enforceable Through Title V Permit
13. PM-10 emission rate shall not exceed 0.10 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
14. SO₂ emission rate shall not exceed 0.01 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Oxides of nitrogen (as NO₂) emission rate shall not exceed 65 ppmv @ 15% O₂ and 40.2 lb/day. [District Rules 4701 and 4702] 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: LOST HILLS GAS PLANT, NE 15, T.27S, R.21E., M.D.B. & M., LOST HILLS, CA
S-43-8-11: Nov 10 2005 1:57PM - ANYABEU

16. Volatile organic compounds (VOC's) emission rate shall not exceed 304 ppmv @ 15% O₂ and 87.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Carbon monoxide (CO) emission rate shall not exceed 463 ppmv @ 15% O₂ and 232.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
18. District-witnessed source testing for NO_x and CO emission rates shall be conducted using CARB Method 100, and District-witnessed source testing for VOC emission rates shall be conducted using EPA Method 25 or EPA Method 18, referenced as methane, not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Documentation of fuel gas sulfur content shall be submitted to District with source test results. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
21. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Rule 402 (Madera) and 404 (all 7 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
22. If the IC engine is fired on certified natural gas, then maintain on file copies of all natural gas bills or suppliers certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. If the engine is not fired on certified natural gas, then the sulfur content of the gas shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. The operator of an internal combustion (IC) engine 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
26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rules 406 (Fresno), 404 (Madera), 407 (Kern, Kings, San Joaquin, Stanislaus, Merced, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

29. If either the NOx or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702]
30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702]
31. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NOx and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702]
32. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternate device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. [District Rule 4702]
Federally Enforceable Through Title V Permit
33. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
35. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-43-9-11

EXPIRATION DATE: 08/31/2009

SECTION: NE15 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

825 BHP REFRIGERATION COMPRESSION UNIT #6 INCLUDING NATURAL GAS FIRED IC ENGINE AND SHARED WITH PERMIT UNITS S-43-7 AND '8 SUCTION SCRUBBER (V-6), ECONOMIZER (V-7), SURGE TANK (V-9), COMPRESSOR (C-1A), OIL TRAP (V-10) & CONDENSERS (AC-1A, AC-1B, AC-1C)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Upon 7 days written notice to the District this engine may be designated as a dormant emission unit or an active emission unit. [District Rule 1070]
3. When designated as a dormant emissions unit fuel supply line shall be physically disconnected from the emission unit. [District Rule 2080]
4. Source testing is required within 60 days of recommencing operation if a source test has not been performed within the past 24 months. [District Rules 2201, 4701, and 4702]
5. During non operation of this unit the permittee shall not be required to perform source testing, fuel sulfur content certification, and monitoring requirements. [District Rules 2201, 4701, and 4702]
6. Permittee shall maintain accurate records of the time and duration of non operation of this unit. [District Rules 2201, 4701, and 4702]
7. Operation shall include lube oil head tank (V-26) and I.C. engine fuel scrubber (V-4) shared between permit unit #'s S-43-4, '5, '6, '7, '8, and '9. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Compressor discharge piece shall be vented to the vapor recovery system listed on PTO# S-43-3. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Fuel gas sulfur content shall not exceed 0.3 gr/dscf as H₂S. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Condensate from compressor scrubbers and inlet separators shall be piped to low-pressure condensate vessel of permit S-43-1 or to any tank at the Lost Hill 1 treating facility served by vapor collection and control system S-1548-120. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Records of inspections, repairs and maintenance of fugitive VOC sources shall be kept and made readily available for District inspection. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
12. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081, 3.0] Federally Enforceable Through Title V Permit
13. PM-10 emission rate shall not exceed 0.10 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
14. SO₂ emission rate shall not exceed 0.01 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Oxides of nitrogen (as NO₂) emission rate shall not exceed 65 ppmv @ 15% O₂ and 40.2 lb/day. [District Rules 4701 and 4702] 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: LOST HILLS GAS PLANT, NE 15, T.27S, R.21E., M.D.B. & M., LOST HILLS, CA
S-43-9-11: Nov 10 2008 1:57PM - ATYABEU

16. Volatile organic compounds (VOC's) emission rate shall not exceed 304 ppmv @ 15% O₂ and 87.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Carbon monoxide (CO) emission rate shall not exceed 463 ppmv @ 15% O₂ and 232.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
18. District-witnessed source testing for NO_x and CO emission rates shall be conducted using CARB Method 100, and District-witnessed source testing for VOC emission rates shall be conducted using EPA Method 25 or EPA Method 18, referenced as methane, not less than once every 24 months. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Documentation of fuel gas sulfur content shall be submitted to District with source test results. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
21. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Rule 402 (Madera) and 404 (all 7 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
22. If the IC engine is fired on certified natural gas, then maintain on file copies of all natural gas bills or suppliers certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. If the engine is not fired on certified natural gas, then the sulfur content of the gas shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. The operator of an internal combustion (IC) engine 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
26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rules 406 (Fresno), 404 (Madera), 407 (Kern, Kings, San Joaquin, Stanislaus, Merced, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702]

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

29. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702]
30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702]
31. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702]
32. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternate device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. [District Rule 4702] Federally Enforceable Through Title V Permit
33. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
34. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
35. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-43-15-8

EXPIRATION DATE: 08/31/2009

SECTION: NE15 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

DORMANT: 5 MMBTU/HR NATURAL GAS-FIRED HOT OIL HEATER

PERMIT UNIT REQUIREMENTS

1. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Operator shall provide written notification to the District 7 days prior to performing dormancy procedures on active systems or sections, and prior to recommencing operation of dormant systems or sections. [District Rule 2080] Federally Enforceable Through Title V Permit
3. Permittee shall not be required to perform source testing, fuel sulfur content certification, monitoring, inspections, or record keeping (except to document non-operation). [District Rule 2080] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
5. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: NO_x (as NO₂): 0.10 lb/MMBtu, or CO: 112 ppmvd @ 3% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Excess combustion air shall be maintained at no less than 10% unless continuous operation analyzer/controller is utilized. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The pressure regulator shall be set such that the heater's natural gas supply is limited to 5.0 MMBtu/hr. [District Rules 2201, 4305, 2.0 and 4306, 2.0] Federally Enforceable Through Title V Permit
9. The pressure regulator's adjusting screw(s) shall be fixed with wire seals. [District Rule] Federally Enforceable Through Title V Permit
10. Heater shall be fired exclusively on natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
11. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
12. Upon recommencing operation, fuel sulfur content and higher heating value shall be certified by a third party fuel supplier or each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 2080 and 2520, 9.3.2] 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.

13. 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 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit 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
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Appendix B Baseline Engine Fuel-Use Chart

The engine fuel-use data is taken from ERC Project S-1075362. The fuel-use for each month for each engine is combined into monthly totals for all-engines-combined in the following table.

	Jan 03	Jan 04	Feb 03	Feb 04	Mar 03	Mar 04	Apr 03	Apr 04	May 03	May 04	Jun 03	Jun 04	Jul 03	Jul 04	Aug 03	Aug 04	Sep 03	Sep 04	Oct 02	Oct 03	Nov 02	Nov 03	Dec 02	Dec 03
S-43-4	1,232	4,416	680	4,374	4,417	4,500	1,635	3,123	2,048	1,306	690	672	2,105	865	2,403	0	4,041	0	2,119	4,446	2,949	4,568	4,244	4,383
S-43-5	4,538	4,378	3,934	4,425	3,050	4,744	3,932	3,867	4,205	2,041	3,232	14	2,037	1,351	1,873	77	2,913	359	3,396	4,508	3,920	4,574	2,089	4,122
S-43-6	3,305	159	3,686	45	1,373	0	2,421	1,110	2,711	19	4,547	3,041	4,324	2,481	4,334	4,589	1,239	3,851	3,390	250	1,446	0	2,437	606
S-43-7	2,011	3,011	3,472	2,352	3,773	273	2,638	1,729	3,846	922	398	426	1,640	19	1,427	13	1,892	31	3,721	2,265	1,568	3,723	187	1,013
S-43-8	1,683	1,672	0	2,112	2,659	4,022	3,376	2,103	3,820	3,189	3,573	1,735	2,715	1,255	3,755	3,001	3,449	1,164	2,953	3,916	2,029	3,848	3,505	3,989
S-43-9	4,175	0	3,350	34	1,228	0	727	0	0	0	3,191	1,903	2,805	3,203	2,297	1,716	1,746	3,131	757	1,763	3,638	0	3,745	2,104
Monthly Total	16,944	13,636	15,122	13,342	16,500	13,539	14,729	11,932	16,630	7,477	15,631	7,791	15,626	9,174	16,089	9,396	15,280	8,536	16,336	17,148	15,550	16,713	16,207	16,217

Appendix C Draft ERC Certificate

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

S-4212-24

ISSUED TO: AERA ENERGY LLC
ISSUED DATE: <DRAFT>
LOCATION OF REDUCTION: LOST HILLS GAS PLANT
NE S15, T27S, R21E., M.D.B. & M.
LOST HILLS, CA

For CO2E Reduction In The Amount Of:

12003 metric tons / year

☐ Conditions Attached

Method Of Reduction

- ☒ Shutdown of Entire Stationary Source
☐ Shutdown of Emissions Units
☐ Other

Shutdown of engines and oil heater verified as permanent within the State of California

Emission Reduction Qualification Criteria

This emission reduction is surplus and additional to all applicable regulatory requirements.

Seyed Sadredin, Executive Director / APCO

David Warner, Director of Permit Services