



NOV 18 2013

Mr. Mike Harnden AEMETIS Advanced Fuels Keyes, Inc. P O Box 879 Keyes, CA 95328-0879

Re: Final - Authority to Construct / COC (Significant Mod)

> District Facility # N-7488 **Project # N-1132213**

Dear Mr. Harnden:

The Air Pollution Control Officer has issued an Authority to Construct (N-7488-8-5) with a Certificate of Conformity to AEMETIS Advanced Fuels Keyes, Inc at 4209 Jessup Road, Ceres. This project is to modify the permit for a decantation process to remove the daily emission limit for fugitive VOC emissions from various components including valves, flanges, pumps, etc. and associated periodic monitoring and recordkeeping requirements in facility's leak detection and repair (LDAR) program. Enclosed are the an Authority to Construct and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permit was published on September 18, 2013. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on September 13, 2013. No comments were received following the District's preliminary decision on this project.

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

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 60 days.

> Seyed Sadredin Executive Director/Air Pollution Control Officer

Mr. Mike Harnden Page 2

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

XXX

Sincerely,

Director of Permit Services

DW:JK/st

Enclosures

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





AUTHORITY TO CONSTRUCT

PERMIT NO: N-7488-8-5

ISSUANCE DATE: 11/13/2013

LEGAL OWNER OR OPERATOR: AEMETIS ADVANCED FUELS KEYES INC

MAILING ADDRESS:

P O BOX 879

KEYES, CA 95328-0879

LOCATION:

4209 JESSUP ROAD

CERES, CA

EQUIPMENT DESCRIPTION:

MODIFICATION OF DECANTATION PROCESS CONSISTING OF FIVE 130 HP ALFA LAVAL MODEL CHNX 944 DECANTER CENTRIFUGES (OR EQUAL), ONE WHOLE STILLAGE HOLDING TANK, ONE FIXED-ROOF THIN STILLAGE HOLDING TANK, ONE CENTRATE TANK, THE EVAPORATION SYSTEM WITH ONE THIN STILLAGE FEED TANK, AND AN ENVITECH 2-STAGE PROCESS VENT CONDENSER WITH A 550 GALLON WATER RECIRCULATION TANK (SHARED WITH UNITS N-7488-5 AND -7) SERVED BY A NESTEC 1.68 MMBTU/HR NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO). THE RTO SERVES UNIT N-7488-5, -6, -7, AND -8.: REMOVE FUGITIVE VOC LIMITS AND ASSOCIATED RECORDKEEPING AND REPORTING REQUIREMENTS

CONDITIONS

- This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
- Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
- The tanks shall be vented to a closed vapor recovery system that collects all VOCs from the equipment and vents them to the process vent condenser and the RTO system. The vapor recovery system shall be maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

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DAVID WARNER, Director of Permit Services

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475

- 4. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 100 ppmv for valves and connectors and 500 ppmv for pump seals, above background, is a violation of this permit and Rule 2201 and shall be reported as a deviation. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201 and 4623] Federally Enforceable Through Title V Permit
- 6. VOC content in the fluid handled in the decantation process shall be less than or equal to 10% by weight. Compliance with this condition may be verified by sampling fluid from the whole stillage tank rather than sampling fluids from other vessels. [District Rules 2201, 4455, 40 CFR 60.480a (d)(5)] Federally Enforceable Through Title V Permit
- 7. VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids, or EPA Method 8260B, or other alterative test methods approved by the District prior to their use. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
- 8. The permittee shall include in the Operator Management Plan all components exclusively handling liquid streams with VOC content less than 10% by weight. [District Rule 4455] Federally Enforceable Through Title V Permit
- 9. The results of any laboratory testing or other pertinent information to demonstrate compliance with the exemption criteria for components exclusively handling liquid streams with VOC content less than 10% by weight shall be submitted with the Operator Management Plan. [District Rule 4455] Federally Enforceable Through Title V Permit
- 10. The permittee shall keep records of the following items for VOC content testing: a.) the date, b.) vessel or location from where fluid is sampled, c.) name of the person taking and analyzing samples and company affiliation, d.) VOC content (% by wt.) in the sample, and e.) report of the test results. [District Rules 2201 and 4455, 40 CFR 60.486a (i)(3)] Federally Enforceable Through Title V Permit
- 11. The RTO shall be fired only on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The RTO chamber temperature shall be maintained at a minimum temperature of 1,500 degrees Fahrenheit before incinerating the vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The RTO shall be permanently equipped with a temperature measurement device that detects the combustion chamber temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. VOC emissions from the RTO stack shall not exceed 0.072 lb/1,000 gallons of ethanol produced. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 15. The ethanol production rate shall not exceed 210,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. The ethanol production rate shall not exceed 70,000,000 gallons in any 12 consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The overall VOC control efficiency of the process vent condenser and the RTO system shall be at least 99.5% (by weight). [District Rules 2201] Federally Enforceable Through Title V Permit
- 18. Emissions rates from natural gas combustion in the RTO burner shall not exceed any of the following limits: 0.0182 lb-NOx/MMBtu; 0.011 lb-CO/MMBtu; 0.0055 lb-VOC/MMBtu; 0.0076 lb-PM10/MMBtu; or 0.00285 lb-SOx/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Source testing to determine compliance with the VOC emissions rate (lb/1,000 gallon of ethanol produced) and the overall VOC control efficiency (%) shall be conducted at least once every 12 months from the latest source test. [District Rule 2201] Federally Enforceable Through Title V Permit

- 20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 21. Sampling ports shall be placed at the appropriate locations (i.e. prior to the condenser, after the condenser, at the inlet of the RTO, and at the exhaust outlet of the RTO) to determine compliance with the overall VOC control efficiency (%) of the condenser and the RTO system and the VOC emissions rate (lb/1,000 gallon of ethanol produced). [District Rule 1081] Federally Enforceable Through Title V Permit
- 22. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. All emissions measurements shall be made with the ethanol production equipment operating at conditions representative of normal operations. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. During source testing operations and measurements, the actual ethanol production throughput (in gal-ethanol/hr) shall be recorded and submitted as part of the source test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. VOC emissions shall be measured using EPA Methods 18, 25, or 25A in conjunction with the methodologies specified in the US EPA's "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions and VOC Sampling at Wet and Dry Grain Mills and Ethanol Production Facilities" document. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 26. The permittee shall monitor and record the chamber temperature of the RTO at least once a day while the laden process stream is vented to the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. The permittee shall maintain records of the amount of ethanol produced, in gallons, on daily basis. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain records of the amount of ethanol produced, in gallons, in the latest 12 consecutive month period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Records of RTO inspections and maintenance shall be maintained. These records shall include date of inspection, identification of the individual performing the inspection, and a description of the problem and the corrective action taken. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. All records shall be maintained on-site for a period of at least five years, and shall be made readily available to the APCO, ARB and US EPA upon request. [District Rules 1070, 2201, 4455, and 4623] Federally Enforceable Through Title V Permit
- 31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit