

JUN 26 2013

Michael Kummer Hilmar Cheese Company P.O. Box 910 Hilmar, CA 95324

RE: Notice of Final Action - Authority to Construct

> Facility Number: N-1275 **Project Number: N-1131453**

Dear Mr. Kummer:

The Air Pollution Control Officer has issued the Authority to Construct permit to Hilmar Cheese Company for the addition of an anaerobic digester, replacement of a sulfur scrubber, and replacement of a digester gas-fired flare, at 9001 N Lander Ave, Hilmar, CA. Enclosed are the Authority to Construct permit 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 May 16, 2013. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on May 14, 2013. All comments received following the District's preliminary decision on this project were considered.

Comments received by the District during the public notice period resulted in addition of EPA Method 18 to the allowable VOC source test methods for the flare. These changes were minor and did not trigger additional public notification requirements, nor did they have any impact upon the Best Available Control Technology determination or on the amount of offsets required for project approval.

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. Michael Kummer Page 2

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney at (559) 230-6000.

Sincerely,

David Warner

Director of Permit Services

DW:st

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email

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

NOTICE OF FINAL DECISION FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT AND THE PROPOSED SIGNIFICANT MODIFICATION OF FEDERALLY MANDATED OPERATING PERMIT

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued the Authority to Construct permit to Hilmar Cheese Company for the addition of an anaerobic digester, replacement of a sulfur scrubber, and replacement of a digester gas-fired flare, at 9001 N Lander Ave, Hilmar, CA.

All comments received following the District's preliminary decision on this project were considered.

Comments received by the District during the public notice period resulted in addition of EPA Method 18 to the allowable VOC source test methods for the flare. These changes were minor and did not trigger additional public notification requirements, nor did they have any impact upon the Best Available Control Technology determination or on the amount of offsets required for project approval.

The District's analysis of the legal and factual basis for this proposed action , project #1131453, is available for public inspection at

http://www.valleyair.org/notices/public_notices_idx.htm, the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726, and at any other District office. For additional information, please contact the District at (559) 230-6000.





AUTHORITY TO CONSTRUCT

PERMIT NO: N-1275-23-8 ISSUANCE DATE: 06/21/2013

LEGAL OWNER OR OPERATOR: HILMAR CHEESE COMPANY

MAILING ADDRESS: ATTN EHS COORDINATOR

P O BOX 910 HILMAR, CA 95324

LOCATION:

9001 N LANDER AVE HILMAR, CA 95324

EQUIPMENT DESCRIPTION:

MODIFICATION OF 2.5 MILLION GALLON PER DAY CHEESE WASTEWATER ANAEROBIC DIGESTER SERVED BY CEILCOTE SPT 14-84 WET SCRUBBER SYSTEM AND VAREC MODEL 244E ENCLOSED FLARE: ADD A SECOND DIGESTER UNIT, REPLACE THE H2S SCRUBBER WITH TWO PACKED TOWER WET SCRUBBERS, LOWER THE H2S CONCENTRATION AT THE SCRUBBER OUTLET FROM 26 PPMV TO 14 PPMV AND REPLACE EXISTING VAREC MODEL 244E ENCLOSED FLARE WITH A 625 CFM VAREC MODEL 244E ENCLOSED FLARE

CONDITIONS

- 1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
- 3. This Authority to Construct (ATC) cancels and supersedes ATC N-1275-23-7. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 5. Visible emissions from the flare serving the anaerobic digesters shall not equal or exceed Ringelmann 1/4 or 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rules 2201 and 4101] 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.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

- 6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 7. The anaerobic digester system and its associated piping shall be maintained leak free. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. This flare shall only be fired on biogas collected from the anaerobic digester system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The facility-wide NOx emissions shall not exceed 34,996 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The facility-wide PM10 emissions shall not exceed 29,200 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The flare heat input shall not exceed 608.7 MMBtu/day. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 12. Emissions from the flare shall not exceed any of the following limits: 0.06 lb-NOx/MMBtu (as NO2); 0.02 lb-PM10/MMBtu; 0.30 lb-CO/MMBtu; or 0.002 lb-VOC/MMBtu (as methane). [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- 13. The sulfur content of the biogas being incinerated by the flare shall not exceed 14 ppmv (as H2S). [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Source testing to measure NOx, CO and VOC emissions from the digester-fired flare shall be conducted within 60 days of initial start-up and at least once every twelve (12) months thereafter. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- 15. For source test purposes, NOx emissions from the flare shall be determined using EPA Method 19 on a heat input basis, or EPA Method 3A, EPA Method 7E, or ARB Method 100 on a ppmv basis. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- 16. For source test purposes, CO emissions from the flare shall be determined using EPA Method 10 or 10B, ARB Methods 1 through 5 with 10, or ARB Method 100. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. For source test purposes, VOC emissions from the flare shall be determined using EPA Method 18 or 25 or 25a. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- 18. Stack gas oxygen (O2) shall be determined using EPA Method 3A, EPA Method 7E, or ARB Method 100. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- 19. 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 Rules 1081 and 4311] Federally Enforceable Through Title V Permit
- 20. The results of each source test shall be submitted to the District within 45 days thereafter. [District Rules 1081 and 4311] Federally Enforceable Through Title V Permit
- 21. Operator shall determine digester gas fuel higher heating value annually by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Sampling ports for biogas testing shall be provided in accordance with District requirements. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. At least once every 120 days, the hydrogen sulfide concentration of the biogas shall be determined by an independent, certified laboratory using one of the following test methods: EPA Method 11, EPA Method 15, ASTM Method D1072, D3031, D4084, D3246, or D5504. Once three consecutive 120-day laboratory tests show compliance with the permitted hydrogen sulfide concentration limit, the laboratory testing frequency may be reduced to annually. If a subsequent annual laboratory test shows a violation of the permitted hydrogen sulfide concentration limit then 120-day laboratory testing shall resume and continue until three consecutive 120-day laboratory tests show compliance. Once compliance is shown on three consecutive 120-day laboratory tests, the laboratory testing frequency may return to annually. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

- 24. At least once every two weeks, the facility shall test the biogas to demonstrate compliance with the permitted hydrogen sulfide concentration limit using a properly calibrated gas chromatograph. Once 12 consecutive biweekly tests show compliance, the testing frequency may be reduced to monthly. If a subsequent test shows a violation of the permitted hydrogen sulfide concentration limit then biweekly testing shall resume and continue until 12 consecutive tests show compliance. Once compliance is shown on 12 consecutive biweekly tests, the testing frequency may return to monthly. It is not necessary for the facility to perform gas chromatograph testing during the week in which either the 120-day or annual laboratory testing is performed. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 25. The gas chromatograph used for the biweekly testing shall be calibrated according to the manufacturer's recommendations. Records of the gas chromatograph equipment calibration shall be kept and shall be made available for District inspection upon request. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 26. Biogas sampling shall be conducted using the methods and procedures approved by the District. The District shall be notified each time the biogas sampling frequency changes. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. A flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
- 28. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
- 29. Flare shall be equipped with a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device capable of continuously detecting at least one pilot flame or the flare flame is present. The flame detection device shall be kept operational at all times except during flare maintenance when the flare is isolated from gas flow. During essential planned power outages when the flare is operating, the pilot monitor is allowed to be non-functional if the flare flame is clearly visible to onsite operators. All pilot monitor downtime shall be reported annually pursuant to Rule 4311, Section 6.2.3.6. [District Rule 4311] Federally Enforceable Through Title V Permit
- 30. If the flare uses a flow-sensing automatic ignition system and does not use a continuous flame pilot, the flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
- 31. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Section 6.5, and all commitments listed in that plan have been met. This standard does not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere. [District Rule 4311] Federally Enforceable Through Title V Permit
- 32. The operator shall monitor and record the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. [District Rule 4311] Federally Enforceable Through Title V Permit
- 33. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of this rule shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, which ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311] Federally Enforceable Through Title V Permit
- 34. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: the results of an investigation to determine the primary cause and contributing factors of the flaring event; any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; if appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and the date, time, and duration of the flaring event. [District Rule 4311] Federally Enforceable Through Title V Permit

- 35. The operator of a flare subject to flare monitoring requirements pursuant to Section 5.10 shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: the total volumetric flow of vent gas in standard cubic feet for each day; if the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; a flow verification report which shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311] Federally Enforceable Through Title V Permit
- 36. For purposes of the flow verification report required by Section 6.2.3.8, vent gas flow shall be determined using one or more of the following methods, or by any alternative method approved by the APCO, ARB, and EPA: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment installed pursuant to Section 5.10; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311] Federally Enforceable Through Title V Permit
- 37. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311] Federally Enforceable Through Title V Permit
- 38. An updated FMP shall be submitted by the operator pursuant to Section 6.5 addressing new or modified equipment, prior to installing the equipment. Updated FMP submittals are only required if: (1) The equipment change would require an authority to construct (ATC) and would impact the emissions from the flare, and (2) The ATC is deemed complete after June 18, 2009, and (3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP, and has no associated increase in flare emissions. [District Rule 4311] Federally Enforceable Through Title V Permit
- 39. The anaerobic digester system and its associated piping shall be inspected for leaks at least annually. Any leak detected on the basis of sight, smell, or sound, shall be recorded and a corrective action shall be taken to eliminate the leak. [District Rule 2201] Federally Enforceable Through Title V Permit
- 40. Records of leak inspections shall contain at least an identification of a person performing an inspection, date and time of the inspection, leak location, and corrective action taken to eliminate leaks. The records shall be maintained, kept, and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. The permittee shall determine and record the annual facility-wide NOx and PM10 emissions, based a rolling 12-month period, using the operational records of each permit unit, and all emission calculations as well as each assumption and each process variable used in the respective calculations. The records shall be updated at least monthly. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 42. The permittee shall maintain records of: (1) the name of the sampler, and the date and time of biogas sampling for H2S, (2) the name of the tester, and the date and time of biogas testing for H2S, (3) test results showing the biogas concentration (in ppmv) of H2S. [District Rule 1081] Federally Enforceable Through Title V Permit
- 43. Permittee shall maintain daily and annual records of quantity of digester gas combusted in the flare, annual test results of higher heating value of digester gas, and daily heat input for the flare. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 44. Permittee shall maintain the following records: a copy of the source testing result conducted pursuant to Section 6.4.2; a copy of the approved flare minimization plan pursuant to Section 6.5; a copy of annual reports submitted to the APCO pursuant to Section 6.2. [District Rule 4311] Federally Enforceable Through Title V Permit
- 45. Permittee shall maintain records of the following when the flare is used during an emergency: duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311] Federally Enforceable Through Title V Permit
- 46. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070 and 4311] Federally Enforceable Through Title V Permit