

March 14, 2023

Mr. Marc Percival
Hilmar Cheese Company
PO Box 910
Hilmar, CA 95324

**Re: Final – Authority to Construct / Certificate of Conformity (Minor Modification)
District Facility # N-1275
Project # N-1223921**

Dear Mr. Percival:

The Air Pollution Control Officer has issued an Authority to Construct (N-1275-23-12) with a Certificate of Conformity to Hilmar Cheese Company at 9001 N Lander Ave, Hilmar. The facility proposed to revise the annual fuel throughput of the 29.25 MMBtu/hr biogas-fired flare to 100,000 MMBtu/year to comply with District Rule 4311 and remove the 40 CFR Part 64 Compliance Assurance Monitoring (CAM) requirements. Enclosed are the Authority to Construct and a copy of the notice of final action that has been posted on the District's website (www.valleyair.org).

Notice of the District's preliminary decision to issue the Authority to Construct permit was posted on January 25, 23. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on January 25, 2023. No comments were received following the District's preliminary decision on this project.

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.

Prior to operating with the 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. Application forms have been enclosed for your use. These forms may also be found on the District's website at www.valleyair.org.

Samir Sheikh
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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Clements", written in a cursive style.

Brian Clements
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email
cc: Gerardo Rios, EPA (w/enclosure) via EPS

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1275-23-12

ISSUANCE DATE: 03/14/2023

LEGAL OWNER OR OPERATOR: HILMAR CHEESE COMPANY
MAILING ADDRESS: ATTN ENVIRONMENTAL COORDINATOR
PO 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 SYSTEM WITH TWO ANAEROBIC DIGESTERS SERVED BY TWO CEILCOTE SPT-18-144 WET SCRUBBERS AND 625 CFM VAREC MODEL 244E ENCLOSED FLARE: COMPLY WITH RULE 4311 BY LIMITING THE ANNUAL THROUGHPUT LIMIT TO 100,000 MMBTU/YR AND REMOVE 40 CFR PART 64 COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

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. 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
4. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
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]

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.

Samir Sheikh, Executive Director / APCO



Brian Clements, Director of Permit Services

N-1275-23-12 : Mar 14 2023 2:19PM - YOSHIMUJ : Joint Inspection NOT Required

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 NO_x 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. On and after January 1, 2024, permittee shall limit flaring annual throughput to levels not to exceed 100,000 MMBtu for any rolling 12-month period. [District Rule 4311]
13. Emissions from the flare shall not exceed any of the following limits: 0.06 lb-NO_x/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
14. The sulfur content of the biogas being incinerated by the flare shall not exceed 14 ppmv (as H₂S). [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Source testing to measure NO_x, CO and VOC emissions from the digester-fired flare shall be conducted at least once every twelve (12) months. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
16. For source test purposes, NO_x 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
17. 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
18. 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
19. 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
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 Rules 1081 and 4311] Federally Enforceable Through Title V Permit
21. 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
22. 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
23. Sampling ports for biogas testing shall be provided in accordance with District requirements. [District Rule 1081] Federally Enforceable Through Title V Permit
24. 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

CONDITIONS CONTINUE ON NEXT PAGE

25. 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
26. 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
27. 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
28. 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
29. 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
30. 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
31. 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
32. 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
33. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of gas combusted in the flare shall be installed, utilized, and maintained. [District Rules 2201 and 4311]
34. The higher heating value (HHV) of the gas introduced into the flare shall be determined at time of sulfur testing. The measured HHV and amount of gas flared shall be used to determine compliance with the heat input limits in this permit. [District Rules 1070, 2201, and 4311]
35. The owner or operator shall maintain accurate daily records of volume (scf), type, higher heating value, sulfur content, total heat input rate (MMBtu) and an up-to-date total annual heat input rate (MMBtu) of the gas flared. [District Rules 2201 and 4311]
36. 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
37. 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

38. 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
39. 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
40. On and after January 1, 2024, if the flare exceeds 100,000 MMBtu/year heat input for two consecutive calendar years, the operator shall notify the District in writing of the exceedance within 30 days following the end of the second calendar year. By April 15 of the year after the end of the second consecutive calendar year in which an exceedance of the annual heat input rate occurred, the applicant shall submit an Authority to Construct application to modify or replace the flare to comply with 0.018 lb-NO_x/MMBtu and 0.008 lb-VOC/MMBtu emission limits, as noted in Table 3 of Rule 4311 (12/17/20). [District Rule 4311]
41. The operator of a flare subject to flare minimization requirements pursuant to Section 5.11 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7 of Rule 4311. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 of Rule 4311 shall not be required to monitor vent gas flow to the flare. [District Rule 4311]
42. 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
43. 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
44. 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
45. 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
46. 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

47. The permittee shall determine and record the annual facility-wide NO_x 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
48. 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
49. 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
50. 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
51. 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
52. 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