

January 13, 2021

Curtis Hauptman
Lakeside Pipeline LLC
3711 Meadow View Dr, Ste 100
Redding, CA 96002

RE: Notice of Final Action - Authority to Construct
Facility Number: C-9441
Project Number: C-1202485

Dear Mr. Hauptman:

The Air Pollution Control Officer has issued the Authority to Construct permit to Lakeside Pipeline LLC for the modification of a biogas cleanup plant under permit unit C-9441-1 to install a new 107 MMBtu/hr Parnel Biogas Inc backup open flare, at 15662 7th Ave, Hanford. Enclosed are the Authority to Construct permit 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 December 10, 2020. The District's analysis of the proposal was also sent to CARB on December 10, 2020. 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.

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

Sincerely,



Arnaud Marjollet
Director of Permit Services

AM:gb

Enclosures

cc: Courtney Graham, CARB (w/ enclosure) via email

AUTHORITY TO CONSTRUCT

PERMIT NO: C-9441-1-1

ISSUANCE DATE: 01/13/2021

LEGAL OWNER OR OPERATOR: LAKESIDE PIPELINE LLC
MAILING ADDRESS: 3711 MEADOW VIEW DR, STE 100
REDDING, CA 96002

LOCATION: 15662 7TH AVE
HANFORD, CA 93230

EQUIPMENT DESCRIPTION:

MODIFICATION OF BIOGAS CLEANUP PLANT CONSISTING OF AN ACTIVATED CARBON ADSORPTION SYSTEM AND CO2 MEMBRANE REMOVAL SYSTEM, CONDENSER AND ASSOCIATED PUMPS AND COMPRESSORS; INSTALL A NEW 107 MMBTU/HR PARNEL BIOGAS INC BACKUP/EMERGENCY BIOGAS-FIRED OPEN FLARE; AND CORRECT THE AMOUNT OF RAW BIOGAS VENTED FROM CO2 MEMBRANE SYSTEM FROM 3% TO 3.5% OF TOTAL BIOGAS PROCESSED IN THE CLEANUP PLANT

CONDITIONS

1. Authority to Construct (ATC) C-9441-1-0 shall be implemented prior to or concurrently with this ATC. [District Rule 2201]
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. The exhaust stack for the flare 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 carbon vessels shall be sealed vapor tight except during servicing of spent carbon in a vessel. [District Rule 2201]
8. Two carbon vessels shall be connected in series and both shall be utilized except during servicing of the spent canister. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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



Arnaud Marjollet, Director of Permit Services

C-9441-1-1 : Jan 13 2021 3:54PM -- BRARG : Joint Inspection NOT Required

9. Activated carbon VOC control device shall be at least 95% efficient in controlling the VOCs from the raw biogas. [District Rule 2201]
10. Sampling ports adequate for extraction of grab samples, measurement of gas flow rate, and use of an FID, PID, or other District-approved VOC detection device shall be provided for both the influent and the effluent gas streams. [District Rule 1081]
11. The total amount of raw biogas processed by the biogas cleanup plant shall not exceed 2.91 MMscf/day. [District Rule 2201]
12. Total waste gas containing CH₄, N₂, or S vented to the atmosphere from the biogas cleanup plant under normal operations shall not exceed 3.5% of the raw biogas processed by the biogas cleanup plant. [District Rule 2201]
13. Venting of off-spec gas shall not exceed either of the following limits: 0.071 MMscf/hr or 1.70 MMscf/day. [District Rule 2201]
14. Venting of off-spec gas shall not exceed 350 hours per year (including start-up and shutdown). [District Rule 2201]
15. Total sulfur emissions from the operation shall not exceed 6.3 lb/day. [District Rule 2201]
16. Sulfur content of vented off-spec gas shall not exceed 0.357 lb/MMscf. [District Rule 2201]
17. Sulfur content of the biogas combusted in the flare shall not exceed 65 ppmv as H₂S. [District Rules 2201, 4102, and 4801]
18. VOC emissions from the operation shall not exceed 2.5 lb/day. [District Rule 2201]
19. VOC content of raw biogas shall not exceed 0.296 lb/MMscf. [District Rule 2201]
20. NH₃ content of raw biogas shall not exceed 1.74 lb/MMscf. [District Rule 2201]
21. Only biogas or biomethane shall be vented through the flare. [District Rule 2201]
22. Flaring of biogas for testing and maintenance, required regulatory purposes, and backup purposes shall not exceed either of the following limits: 332.8 MMBtu in any one day (equivalent to 512,000 scf/day @ 650 Btu/scf), or 31,921.5 MMBtu in any consecutive 365-day period (equivalent to 49,110,000 scf/year @ 650 Btu/scf). [District Rules 2201 and 4102]
23. Emissions from the flare shall not exceed any of the following limits: 0.06 lb-NO_x/MMBtu, 0.015 lb-PM₁₀/MMBtu, 0.31 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rule 2201]
24. A flame shall be present at all times whenever combustible gases are vented through the flare. [District Rule 2201]
25. The 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 2201]
26. The flare shall be operated only for testing and maintenance, required regulatory purposes, backup, and emergency purposes. An emergency is a situation or condition arising from a sudden and reasonably unforeseeable and unpreventable event beyond the control of the operator, such as, but not limited to, unpreventable equipment failure, natural disasters, acts of war or terrorism, and external power curtailment (except due to interruptible power service agreements). An emergency situation requires immediate corrective action to restore safe operation. [District Rules 2201 and 4102]
27. Ongoing compliance with VOC control efficiency requirements shall be demonstrated at least once per week by sampling both the influent and the effluent gas streams for the H₂S removal and gas polishing system with an FID, PID, or other District-approved VOC detection device. If the VOC control efficiency requirements are achieved and there is no single canister breakthrough for 8 consecutive weeks, then the monitoring frequency is extended to at least once every three (3) months. If during the three (3) month monitoring schedule the VOC control efficiency is shown to be less than 95%, weekly monitoring shall resume. [District Rule 2201]
28. The VOC content of the raw biogas shall not exceed 10% by weight. [District Rule 2201]

29. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 2201]
30. Biogas sulfur content analysis shall be performed within 60 days of initial startup operation of flare, and at least once every 12 months thereafter, using EPA Method 11 or EPA Method 15, as appropriate. Records of the biogas sulfur content analysis shall be maintained and provided to the District upon request. [District Rule 2201]
31. The sulfur content of the biogas to be flared shall be monitored and recorded at least once every calendar quarter in which a biogas sulfur content analysis is not performed. If quarterly monitoring shows a violation of the sulfur content limit of this permit, monthly monitoring will be required until six consecutive months of monitoring show compliance with the sulfur content limit. Once compliance with the sulfur content limit is shown for six consecutive months, then the monitoring frequency may return to quarterly. Monitoring shall not be required during periods in which the flare does not operate. [District Rule 2201]
32. Monitoring of the raw biogas sulfur content shall be performed using gas detection tubes calibrated for H₂S; a Testo 350 XL portable emission monitor; a continuous fuel gas monitor that meets the requirements specified in SCAQMD Rule 431.1, Attachment A; District-approved source test methods, including EPA Method 15, ASTM Method D1072, D4084, and D5504; District-approved in-line H₂S monitors; or an alternative method approved by the District. Prior to utilization of in-line monitors to demonstrate compliance with the biogas sulfur content limit of this permit, the permittee shall submit details of the proposed monitoring system, including the make, model, and detection limits, to the District and obtain District approval for the proposed monitor(s). [District Rule 2201]
33. The higher heating value (HHV) of the digester gas shall be determined using ASTM D1826, ASTM 1945 in conjunction with ASTM D3588, or an alternative method approved by the District. [District Rule 2201]
34. Sulfur concentration (H₂S) of the H₂S removal and gas polishing system outlet gas shall be measured monthly. [District Rule 2201]
35. Records of the cumulative running time for the H₂S removal and gas polishing system and the measured influent and effluent VOC concentrations for the H₂S removal and gas polishing system shall be maintained. [District Rule 2201]
36. Permittee shall maintain accurate records of all VOC and H₂S concentration test results and influent and effluent flow rates for the H₂S removal and gas polishing system. [District Rule 1070]
37. Records of hydrogen sulfide analyzer(s) installed or utilized and the calibration records of such analyzer(s) shall be maintained. Records are only required on such analyzer(s) utilized to demonstrate compliance with this permit. [District Rule 2201]
38. The flare shall be equipped with an operational, non-resettable, totalizing mass or volumetric fuel flow meter or other District-approved alternative method to measure the amount of gas combusted in the flare. [District Rule 2201]
39. Permittee shall maintain records of the operation of the backup flare, including the date that the flare was operated and the purpose of the operation (e.g. for testing and maintenance). [District Rule 2201]
40. Records of the methane content and the higher heating value (HHV) in Btu/scf of the biogas shall be maintained for each calendar quarter in which the flare operated. [District Rules 1070 and 2201]
41. Permittee shall maintain daily and annual records of the quantity of gas combusted in the flare in standard cubic feet (scf) and the total heating value in Btu/scf of the gas combusted. [District Rules 1070 and 2201]
42. The total heat input of the biogas combusted in the flare on any given day (MMBtu/day) shall be calculated using the measured quantity of gas combusted and the higher heating value (HHV) determined for the gas from the nearest date(s) to the date that the flare operated. [District Rule 2201]
43. Permittee shall maintain accurate records of the daily quantity of raw biogas (MMscf/day) processed in biogas clean plant under normal operations. [District Rule 2201]
44. Permittee shall maintain accurate records of the daily quantity of off-spec gas vented in scf, and total number of hours off-spec gas vented per year. [District Rule 2201]

45. The permittee shall maintain records of the amount of gas combusted annually, annual throughput, material usage, or other information necessary to demonstrate that this stationary source (C-9441) has the potential to emit, for all processes, less than ten (10.0) tons per year of VOC and less than ten (10.0) tons per year of NOx. [District Rule 4311]
46. All records shall be maintained and retained for a minimum of five (5) years, and shall be made available for District inspection upon request. Records may be maintained and submitted in an electronic format approved by the District. [District Rules 2201 and 4311]