

August 30, 2022

Ignacio Sanchez
VS Digester
1588 N Batavia St
Orange, CA 92867

RE: Notice of Final Action - Authority to Construct
Facility Number: N-9354
Project Number: N-1220041

Dear Ms. Sanchez:

The Air Pollution Control Officer has issued the Authority to Construct permit to VS Digester for a digester system equipped with a backup flare and regenerative thermal oxidizer (ATC N-9354-1-1), at 13775 Murphy Rd in Escalon. 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 July 26, 2022. The District's analysis of the proposal was also sent to CARB on July 26, 2022. 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. Ignacio Sanchez
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Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Nick Peirce 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

BC:mr

Enclosures

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

Facility # N-9354
VS DIGESTER
13749 MURPHY RD
ESCALON, CA 95320

AUTHORITY TO CONSTRUCT (ATC)

QUICK START GUIDE

1. **Pay Invoice:** Please pay enclosed invoice before due date.
2. **Fully Understand ATC:** Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
3. **Follow ATC:** You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.
4. **Notify District:** You must notify the District's Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District's Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.
5. **Source Test:** Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source_testing.htm for source testing resources.
6. **Maintain Records:** Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years. Sample record keeping forms can be found at http://www.valleyair.org/busind/comply/compliance_forms.htm.

By operating in compliance, you are doing your part to improve air quality for all Valley residents.

**For assistance, please contact District Compliance staff at
any of the telephone numbers listed below.**

Samir Sheikh
Executive Director/Air Pollution Control Officer

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AUTHORITY TO CONSTRUCT

PERMIT NO: N-9354-1-1

ISSUANCE DATE: 08/30/2022

LEGAL OWNER OR OPERATOR: VS DIGESTER
MAILING ADDRESS: 13749 MURPHY RD
ESCALON, CA 95320

LOCATION: 13749 MURPHY RD
ESCALON, CA 95320

EQUIPMENT DESCRIPTION:

MODIFICATION OF: DIGESTER SYSTEM CONSISTING OF TWO COVERED DIGESTER LAGOONS, ONE LAGOON, ONE HYDROLYZER, ONE 37.468 MMBTU/HR DIGESTER GAS-FIRED BACKUP FLARE, PERMIT EXEMPT BOILERS (NATURAL GAS-FIRED, 5 MMBTU/HR OR LESS), AND A DIGESTER GAS UPGRADING OPERATION CONSISTING OF FEED GAS BLOWERS, COMPRESSORS, COOLERS, CHILLERS, IRON SPONGE H₂S REMOVAL, A MEMBRANE CO₂ REMOVAL SYSTEM, PRODUCT GAS COMPRESSORS, AND A 1.25 MMBTU/HR TRITON 4.95 NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO): DECREASE BACKUP FLARE HEAT INPUT RATING TO 34.4 MMBTU/HR, AND INCREASE RTO HEAT INPUT RATING TO 2.0 MMBTU/HR. POST PROJECT DESCRIPTION TO READ: DIGESTER SYSTEM CONSISTING OF TWO COVERED DIGESTER LAGOONS, ONE LAGOON, ONE HYDROLYZER, ONE 34.4 MMBTU/HR DIGESTER GAS-FIRED BACKUP FLARE, PERMIT EXEMPT BOILERS (NATURAL GAS-FIRED, 5 MMBTU/HR OR LESS), AND A DIGESTER GAS UPGRADING OPERATION CONSISTING OF FEED GAS BLOWERS, COMPRESSORS, COOLERS, CHILLERS, H₂S SCRUBBER, A MEMBRANE CO₂ REMOVAL SYSTEM, PRODUCT GAS COMPRESSORS, AND A 2.0 MMBTU/HR TRITON 6.95 NATURAL GAS-FIRED REGENERATIVE THERMAL OXIDIZER (RTO)

CONDITIONS

1. 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]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. 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]
4. Visible emissions from the flare shall not equal or exceed 5% opacity or 1/4 Ringelmann for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]

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-9354-1-1 : Aug 30 2022 8:57AM - ROBINSOM : Joint Inspection NOT Required

5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
6. The exhaust stacks of the flare and RTO 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 VOC content of the digester gas produced by the digester system shall not exceed 10% by weight. [District Rule 2201]
8. The flare shall be operated only for testing and maintenance, backup, and emergency purposes. [District Rule 2201]
9. The maximum amount of gas combusted by the flare shall not exceed 44.48 million standard cubic feet (MMscf) per year. [District Rules 2201, 4102, and 4311]
10. The flare shall be equipped with an operational, non-resettable, totalizing mass or volumetric flow meter or other District-approved alternative method to measure the quantity of digester gas flared. [District Rules 2201 and 4311]
11. Emissions rates from the combustion of digester gas in the flare shall not exceed any of the following limits: 0.06 lb-NO_x/MMBtu, 0.64 lb-SO_x/MMBtu, 0.008 lb-PM₁₀/MMBtu, 0.0793 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rule 2201]
12. The sulfur content of the digester gas combusted in the flare shall not exceed 2,200 ppmv as H₂S. The applicant may utilize an averaging period of up to 24 hours in length for demonstration of compliance with the fuel sulfur content limit. [District Rules 2201 and 4801]
13. The sulfur content of the digester gas combusted in this flare shall be monitored and recorded at least once every calendar quarter in which a digester gas 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 of the sulfur content of the digester gas flared shall not be required if the flare does not operate during that period. Records of the results of monitoring of the digester gas sulfur content shall be maintained. [District Rule 2201]
14. Monitoring of the digester gas 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 digester gas 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]
15. A flame shall be present at all times whenever combustible gases are vented through the flare. [District Rules 2201 and 4311]
16. 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 Rules 2201 and 4311]
17. Unless the flare is equipped with a flow-sensing ignition system, the flare shall be equipped and operated 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. [District Rules 2201 and 4311]
18. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rules 2201 and 4311]
19. Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rules 2201 and 4311]
20. Upon request, the operator of an open flare in which the flare gas pressure is less than 5 psig shall make available records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rules 2201 and 4311]
21. Only PUC quality natural gas shall be used in the RTO as supplemental fuel. [District Rules 2201 and 4801]

CONDITIONS CONTINUE ON NEXT PAGE

22. The RTO shall be operated with a combustion chamber temperature of no less than 1600 degrees F and the retention time shall be no less than 0.5 seconds. [District Rule 2201]
23. The RTO shall be heated to the proper operating temperature prior to introducing the contaminated air stream. [District Rules 2201 and 4104]
24. Emissions from the RTO shall not exceed any of the following limits: 0.04 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.0075 lb-PM₁₀/MMBtu, 0.0824 lb-CO/MMBtu, or 0.0054 lb-VOC/MMBtu. [District Rule 2201]
25. The RTO temperature shall be monitored and recorded utilizing a continuous monitoring and recording device. The monitoring and recording device shall be maintained in proper operating condition at all times. [District Rule 2201]
26. Permittee shall maintain annual records of the amount of gas combusted by the flare, in million standard cubic feet (MMscf). [District Rules 1070 and 2201]
27. 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 1070, 2201, and 4311]
28. This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [Public Resources Code 21000-21177: California Environmental Quality Act]