

August 25, 2021

Stephen Dvorak
WTE Riverdale, LLC
PO Box 143
Chilton, WI 53014

RE: Notice of Final Action - Authority to Construct
Facility Number: C-9792
Project Number: C-1202318

Dear Mr. Dvorak:

The Air Pollution Control Officer has issued the Authority to Construct permits to WTE Riverdale, LLC for the construction of a digester system with a digester gas-fired backup flare (ATC C-9792-1-0) and a digester gas upgrading operation (ATC C-9792-2-0), at 12840 W Kamm Ave, Riverdale. Enclosed are the Authority to Construct permits 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 permits was posted on July 21, 2021. The District's analysis of the proposal was also sent to CARB on July 21, 2021. 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. Stephen Dvorak
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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:jy

Enclosures

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

AUTHORITY TO CONSTRUCT

PERMIT NO: C-9792-1-0

ISSUANCE DATE: 08/25/2021

LEGAL OWNER OR OPERATOR: WTE RIVERDALE, LLC

MAILING ADDRESS: PO BOX 143
CHILTON, WI 53014

LOCATION: 12840 W KAMM AVE
RIVERDALE, CA 93656

EQUIPMENT DESCRIPTION:

DVO MIXED PLUG-FLOW MESOPHILIC ANAEROBIC DIGESTER SYSTEM CONSISTING OF A RECEPTION PIT AND AN IN-GROUND CONCRETE VESSEL (260' X 144' X 16') WITH ONE 10.75 MMBTU/HR DIGESTER GAS-FIRED BACKUP FLARE, AND TWO PERMIT EXEMPT BOILERS (NATURAL GAS-FIRED, 5 MMBTU/HR OR LESS)

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. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
5. 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]
6. The sulfur content of the digester gas combusted in this flare shall not exceed 4,000 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, 4102, and 4801]
7. The VOC content of the digester gas produced by the digester system shall not exceed 10% by weight. [District Rule 2201]
8. Only digester gas shall be combusted in the flare. [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



Brian Clements, Director of Permit Services

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9. The digester gas-fired backup flare shall not exceed 200 hours of operation per calendar year. [District Rules 2201, 4102, and 4311]
10. Emissions from the flare shall not exceed any of the following limits: 0.06 lb-NO_x/MMBtu, 0.015 lb-PM₁₀/MMBtu, 0.046 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rule 2201]
11. The total heating value of the gas combusted in the flare on given 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]
12. A flame shall be present at all times whenever combustible gases are vented through the flare. [District Rule 2201]
13. 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]
14. 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]
15. 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]
16. The flare shall be operated only for testing and maintenance, backup, and emergency purposes. [District Rule 2201]
17. 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]
18. 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]
19. 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]
20. 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]
21. Monitoring of the digester gas sulfur content shall be performed using gas detection tubes calibrated for H₂S; 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 11 and 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]
22. The permittee shall determine and record the higher heating value (HHV) of the digester gas combusted in the flare at least once in each calendar quarter in which the flare operates. [District Rule 2201]
23. 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]
24. Permittee shall maintain daily records of the hours the backup flare is in operation, including the date the flare was operated and the purpose of the operation (e.g. for testing and maintenance). [District Rules 1070 and 2201]
25. Records of the methane content and the higher heating value (HHV) in Btu/scf of the digester gas shall be maintained for each calendar quarter in which the flare operated. [District Rules 1070 and 2201]

CONDITIONS CONTINUE ON NEXT PAGE

26. 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 of the gas combusted in MMBtu. [District Rules 1070 and 2201]
27. The facility shall maintain records of the amount of gas combusted annually, annual throughput, material usage, or other information necessary to demonstrate that total emissions from the facility (C-9792) are less than ten tons per year for both NOx and VOC. [District Rule 4311]
28. Permittee shall maintain daily and annual records of the quantity of digester gas combusted in the flare in standard cubic feet (scf). [District Rules 1070 and 2201]
29. 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]

AUTHORITY TO CONSTRUCT

PERMIT NO: C-9792-2-0

ISSUANCE DATE: 08/25/2021

LEGAL OWNER OR OPERATOR: WTE RIVERDALE, LLC

MAILING ADDRESS: PO BOX 143
CHILTON, WI 53014

LOCATION: 12840 W KAMM AVE
RIVERDALE, CA 93656

EQUIPMENT DESCRIPTION:


DIGESTER GAS UPGRADING OPERATION CONSISTING OF FEED GAS BLOWERS, COMPRESSORS, COOLERS, CHILLERS, IRON SPONGE H₂S REMOVAL, A MEMBRANE CO₂ REMOVAL SYSTEM, AND PRODUCT GAS COMPRESSORS

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. The sulfur content of the digester gas vented from this emissions unit shall not exceed 5 ppmv as H₂S. [District Rules 2201 and 4801]
3. The oxygen/air injection system shall be maintained and operated in accordance with the supplier's recommendations to minimize the concentration of hydrogen sulfide (H₂S) in the digester gas. [District Rule 2201]
4. 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]

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Samir Sheikh, Executive Director / APCO



Bria Clements, Director of Permit Services
C-9792-2-0 : Aug 25 2021 2:39PM -- YOSHIMUJ : Joint Inspection NOT Required