



MAR - 4 2019

Mr. Ray Arthur Fresno/Clovis Regional WWTP 5607 W Jensen Fresno, CA 93706-9458

Re: Final - Authorities to Construct / Certificates of Conformity (Significant

Mod)

Facility Number: C-535 Project Number: C-1170082

Dear Mr. Arthur:

The Air Pollution Control Officer has issued Authorities to Construct (ATCs) C-535-45-0 and C-535-26-4 to Fresno/Clovis Regional WWTP at 5607 W Jensen Ave, Fresno. Modification is for the installation of a new enclosed John Zink flare under permit unit C-535-45 to operate in conjunction with existing flare listed under permit unit C-535-9 at the facility. Additionally combined with project C-1170082 ATC application is submitted under project # C-1170245 for the modification of an existing 7.46 MMBtu/hr combustion device in the gas conditioning system permitted under C-535-26 to clarify the equipment description so it will read how the system is allowed to combust waste gas and raw untreated digester gas. Enclosed are the ATCs 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 ATCs was published on January 10, 2019. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on January 10, 2019. No comments were received following the District's preliminary decision on this project. During the final action condition # 20 (NOx emission limit) was added on the ATC C-535-45-0 for clarity.

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. Ray Arthur Page 2

Prior to operating with the modifications authorized by the ATCs, 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 are found on the District's website at www.valleyair.org/permits/TVforms.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Singerely,

Arnaud Marjollet

pirector of Permit Services

Enclosures

cc: Tung Le, CARB (w/enclosure) via email

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





AUTHORITY TO CONSTRUCT

PERMIT NO: C-535-45-0

ISSUANCE DATE: 02/27/2019

LEGAL OWNER OR OPERATOR: FRESNO/CLOVIS REGIONAL WWTP

MAILING ADDRESS:

5607 W JENSEN AVE FRESNO, CA 93706-9458

LOCATION:

5607 W JENSEN AVE FRESNO, CA 93706

EQUIPMENT DESCRIPTION:

WASTE WATER TREATMENT PLANT OPERATION SERVED BY A 58.5 MMBTU/HR JOHN ZINK COMPANY WASTE **GAS FLARE**

CONDITIONS

- 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
- 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
- Upon startup of the equipment authorized by this Authority to Construct (ATC), Permit to Operate C-535-18 shall be surrendered to the District and the associated equipment shall be removed or rendered inoperable to mitigate the emissions increase. [District Rule 2201] Federally Enforceable Through Title V Permit
- Prior to operating equipment under this Authority to Construct, permittee shall surrender SOx emission reduction credits for the following quantity of emissions: 1st quarter - 3,274 lb, 2nd quarter - 3,274 lb, 3rd quarter - 3,274 lb, and fourth quarter - 3,274 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
- Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits for the following quantity of emissions: 1st quarter - 8,043 lb, 2nd quarter - 8,043 lb, 3rd quarter - 8,044, and fourth quarter - 8,044. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit

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 Mariollet, Director of Permit Services

- 6. ERC Certificate Numbers N-711-5, N-713-5, S-2896-2, S-2740-2, S-4823-2, S-2802-2, N-1402-2, N-1404-2, or N-1400-2 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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 4102]
- 8. 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] Federally Enforceable Through Title V Permit
- 9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 10. 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]
- 11. The flare shall be operated in a manner preventing the emission of noxious odors or other nuisances. [District Rule 4102]
- 12. The waste gas flare system shall be specifically designed for burning on digester gas except for the pilot light which may be fired on PUC regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 Rule 4311, 5.4] Federally Enforceable Through Title V Permit
- 14. The flare system shall have continuous readout and recording of gas flow rate and stack temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Total volume of gaseous fuel flared shall not exceed 2,160,000 scf per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 17. The flare 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, 5.3] Federally Enforceable Through Title V Permit
- 18. Daily testing of digester gas is required so as to not exceed an average of 200 ppm as hydrogen sulfide (H2S). Corrections shall be made, and re-tested within 3 hours in order to maintain average below 200 ppm. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. VOC emissions shall not exceed 0.0027 lb-VOC/MMBtu. [District Rules 2201 and 4311, 5.7] Federally Enforceable Through Title V Permit
- 20. NOx emissions shall not exceed 0.06 lb-NOx/MMBtu. [District Rules 2201 and 4311, 5.7] Federally Enforceable Through Title V Permit
- 21. Source testing to measure digester gas-combustion NOx and VOC emissions from this unit shall be conducted at least once every twelve (12) months. [District Rule 4311, 6.1.2] Federally Enforceable Through Title V Permit
- 22. The results of each source test shall be submitted to the District within 45 days thereafter. [District Rule 4311, 6.1.2] Federally Enforceable Through Title V Permit
- 23. 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]

- 24. VOC emissions for source test purposes, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case Method 25a may be used, and analysis of halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422 "Determination of Volatile organic Compounds in Emission from Stationary Sources". [District Rule 4311, 6.3.1] Federally Enforceable Through Title V Permit
- 25. NOx emissions for source test purposes, in pounds per million Btu, shall be determined by using EPA Method 19. [District Rule 4311, 6.3.2] Federally Enforceable Through Title V Permit
- 26. NOx and O2 concentrations shall be determined by using EPA Method 3A, EPA Method 7E, or ARB 100. [District Rule 4311, 6.3.3] Federally Enforceable Through Title V Permit
- 27. The sulfur content of gas being flared shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 28. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 29. This flare shall be inspected annually while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If excess emissions continue, a EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 30. Daily records of total gas flared shall be maintained. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 31. Records of flare maintenance, inspections and repair shall be maintained. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 32. Records of daily sulfur testing results shall be maintained. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 33. Records of all source tests shall be maintained. [District Rule 4311, 6.2] Federally Enforceable Through Title V Permit
- 34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4311] Federally Enforceable Through Title V Permit





Facility # C-535 FRESNO/CLOVIS REGIONAL WWTP 5607 W JENSEN AVE FRESNO, CA 93706-9458

AUTHORITY TO CONSTRUCT (ATC) QUICK START GUIDE

- 1. Pay Invoice: Please pay enclosed invoice before due date.
- 2. Modify Your Title V Permit. Prior to operating the equipment authorized under this ATC, submit an application to modify your Title V permit. See application forms at http://www.valleyair.org/busind/pto/ptoforms/1ptoformidx.htm.
- 3. Fully Understand ATC: Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
- 4. Follow ATC: You must construct, modify and/or operate your equipment as specified on the ATC: Any unspecified changes may require a new ATC.
- 5. **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.
- 6. **Source Test**: Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source testing.htm for source testing resources.
- 7. 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

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



Due Date 4/29/2019 Amount Due \$ 8,965.60

Amount Enclosed

ATCFEE C1170245 535 C290665 2/27/2019

RETURN THIS TOP PORTION ONLY, WITH REMITTANCE TO:

FRESNO/CLOVIS REGIONAL WWTP 5607 W JENSEN AVE FRESNO, CA 93706-9458 SJVAPCD 1990 E. Gettysburg Avenue Fresno, CA 93726-0244

Thank You!



SJVAPCD Tax ID: 77-0262563

Facility ID Invoice Date C535 2/27/2019

Invoice Number C290665

Invoice Type
Project: C1170245

FRESNO/CLOVIS REGIONAL WWTP 5607 W JENSEN AVE FRESNO, CA 93706

PROJECT NUMBER: 1170245

APPLICATION FILING FEES ENGINEERING TIME FEES TOTAL FEES

LESS PREVIOUSLY PAID PROJECT FEES APPLIED TO THIS INVOICE

PROJECT FEES DUE (Enclosed is a detailed statement outlining the fees for each item.)

\$ 79.00 \$ 8,886.60 \$ 8,965.60 \$ 0.00 **\$ 8,965.60**

Late Payment (see Rule 3010, Section 11.0 Late Fees)

Postmarked

Total Due

After 4/29/2019 through 5/9/2019

Total Due

After 5/9/2019

\$ 9,862.16

After 5/29/2019

\$ 13,448.40 Permits To Operate MAY BE SUSPENDED

San Joaquin Valley Air Pollution Control District 1990 E. Gettysburg Avenue, Fresno, CA 93726-0244, (559) 230-6020, Fax (559) 230-6063

San Joaquin Valley Air Pollution Control District

Invoice Detail

Facility ID: C535

FRESNO/CLOVIS REGIONAL WWTP

5607 W JENSEN AVE FRESNO, CA 93706 Invoice Nbr:

C290665

Invoice Date: Page: 2/27/2019

Application Filing Fees

Project Nbr	Permit Number	Description	Application Fee
C1170245	C-535-26-4	MODIFICATION OF DIGESTER GAS TREATMENT SYSTEM CONSISTING OF A CHILLER, COMPRESSOR, HYDROGEN SULFIDE REMOVAL UNIT, MEMBRANE PROCESSING UNIT, 7.46 MMBTU/HR JOHN ZINK MODEL ZBRID WASTE GAS/DIGESTER GAS-FIRED COMBUSTION DEVICE AND ACTIVATED CARBON ADSORPTION BEDS: CLARIFY THE EQUIPMENT DESCRIPTION TO ALLOW THE EXISTING 7.46 MMBTU/HR DIGESTER TREATMENT SYSTEM TO COMBUST BOTH WASTE/RAW UNTREATED DIGESTER GAS	\$ 79.00

Total Application Filing Fees:

\$ 79.00

Engineering Time Fees

Project Nbr	Quantity	Rate	Description	Fee
C1170245	43.4 hours	\$ 141.00 /h	After-Hours Engineering Time(OverTime)	\$ 6,119.40
			Less Credit For Application Filing Fees	(\$ 79.00)
			After-Hours Engineering Time(OverTime) SubTotal	\$ 6,040.40
C1170245	26.6 hours	\$ 107.00 /h	Standard Engineering Time	\$ 2,846.20
			Total Engineering Time Fees:	\$ 8,886.60





AUTHORITY TO CONSTRUCT

PERMIT NO: C-535-26-4 **ISSUANCE DATE: 02/27/2019**

LEGAL OWNER OR OPERATOR: FRESNO/CLOVIS REGIONAL WWTP

MAILING ADDRESS:

5607 W JENSEN AVE FRESNO, CA 93706-9458

LOCATION:

5607 W JENSEN AVE FRESNO, CA 93706

EQUIPMENT DESCRIPTION:

MODIFICATION OF DIGESTER GAS TREATMENT SYSTEM CONSISTING OF A CHILLER, COMPRESSOR, HYDROGEN SULFIDE REMOVAL UNIT, MEMBRANE PROCESSING UNIT, 7.46 MMBTU/HR JOHN ZINK MODEL ZBRID WASTE GAS/DIGESTER GAS-FIRED COMBUSTION DEVICE AND ACTIVATED CARBON ADSORPTION BEDS: CLARIFY THE EQUIPMENT DESCRIPTION TO ALLOW THE EXISTING 7.46 MMBTU/HR DIGESTER TREATMENT SYSTEM TO COMBUST BOTH WASTE/RAW UNTREATED DIGESTER GAS

CONDITIONS

- Particulate matter emissions from the exhaust of the combustion device shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 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]
- Emission rates from the combustion device shall not exceed any of the following limits: NOx 0.06 lb/MMBtu; CO -0.20 lb/MMBtu; 20 ppmv VOC @ 3% O2 (as hexane) or 0.0027 lb-VOC/MMBtu; or PM10 - 0.005 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- The H2S content of the raw digester gas processed through this gas treatment system shall not exceed 200 ppmv. [District Ruled 2201 and 4801] Federally Enforceable Through Title V Permit
- Source testing of the NOx and CO emissions from the exhaust of the combustion device shall be performed at least once every five years. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit

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

- 7. Testing to demonstrate compliance with the raw digester gas H2S content limit shall be conducted quarterly. Once eight (8) consecutive quarterly test show compliance, the H2S content testing frequency may be reduce to once every calendar year. If an annual test shows violation of the H2S content limit, then quarterly testing shall resume and continue until eight (8) consecutive tests show compliance. Once compliance is shown on eight (8) consecutive quarterly tests, then testing may return to once every calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. 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 Rule 1081] Federally Enforceable Through Title V Permit
- 9. NOx emissions for source test purposes shall be determined using EPA Method 19. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
- 10. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
- 11. VOC emissions for source test purposes shall be determined using EPA Method 18 or 25. [District Rule 2201]
- 12. Testing to measure the H2S content of the fuel shall be conducted using either EPA Method 15, ASTM Method D1072, D3031, D3246, D4084, D4810, D5504, D6228 or with the use of the Testo 350 XL portable analyzer. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The combustion zone of the combustion device shall be maintained at a minimum of 1,400 degrees Fahrenheit. [District Rule 2520] Federally Enforceable Through Title V Permit
- 15. The combustion device shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2520] Federally Enforceable Through Title V Permit
- 16. The combustion device shall be equipped with a non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of waste gas and raw digester gas combusted in the unit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain daily records of the thermal oxidizer combustion temperature. [District Rule 2520] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain records of: (1) daily amount of waste gas, raw digester gas, and/or PUC-quality natural gas consumed by the combustion device, in standard cubic feet; (2) copy of source test reports; and (3) copies of all annual reports submitted to the District. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit
- 19. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 2201 and 2520] Federally Enforceable Through Title V Permit