



DEC 1 0 2015

Mr. Ray Arthur Fresno Clovis Regional WWTP 5607 W. Jensen Ave. Fresno, CA 93706

Re: Notice of Significant Title V Permit Modification

District Facility # C-535 Project # 1152893

Dear Mr. Arthur:

Enclosed for your review is the District's analysis of an application for significant Title V permit modification for the facility identified above. Fresno Clovis Regional WWTP is proposing a Title V significant permit modification to their digester gas treatment system permit. The applicant is proposing to remove the requirement for the combustion device serving the digester gas treatment system (permit C-535-26) to be equipped with a non-resettable, totalizing volumetric fuel flow meter.

Enclosed are the current Title V permit, proposed modified Title V permit, engineering evaluation, and application. The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the modified Title V operating permit. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Mr. Ray Arthur Page 2

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.

Sincerely,

Arnaud Marjollet

Director of Permit Services

Devand Mariolles

Enclosures

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

TITLE V APPLICATION REVIEW

Significant Modification Project #: 1152893

Engineer: Dustin Brown

Date: December 4, 2015

Facility Number: C-535

Facility Name: Fresno/Clovis Regional Wastewater Treatment Plant

Mailing Address: 5607 W. Jensen Avenue

Fresno, CA 93706

Contact Name: Ray Arthur

Phone: (559) 621-5266

Responsible Official: Rick Staggs

Title: Operations Manager

I. PROPOSAL

Fresno/Clovis Wastewater Treatment Plant (WWTP) is proposing a Title V significant permit modification to modify their existing digester gas treatment system by removing the requirement that the waste gas combustion device be be equipped with a non-resettable, totalizing volumetric fuel flow meter.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

Fresno/Clovis WWTP is located at 5607 W. Jensen Avenue in Fresno, CA.

III. EQUIPMENT DESCRIPTION

Current Permit Equipment Description:

C-535-26-0: 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

Modification Equipment Description:

C-535-26-3: 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: REMOVE NON-RESETTABLE, TOTALIZING FUEL METER REQUIREMENT FROM WASTE GAS COMBUSTION DEVICE

Post Project Equipment Description:

C-535-26-3: 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

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a significant modification because the applicant is proposing to remove an existing fuel meter monitoring requirement and this change does not meet the definition of an administrative amendment or minor modification. As such, this project requires public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, <u>Federally Mandated Operating Permits</u> (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Fresno/Clovis WWTP is proposing to modify their digester gas treatment system consisting of a chiller, compressor, hydrogen sulfide removal unit, membrance processing unit, 7.46 MMBtu/hr John Zink combustion device and activated carbon adsorption bed to remove the requirement that the combustion device be equipped with a continuous and totalizing volumetric fuel flow meter.

This digester gas treatment system was originally permitted under project C-1110245. Within that project, the combustion device was assumed to operate a maximum of 24 hours/day and 8,760 hours/year. There was no limitation on the amount of waste gas that could be processed through the combustion device.

In addition, there are no other applicable underlying requirements that would require the combustion unit within the digester gas treatment system to continuously monitor, record, and totalize the amount of waste gas being processed.

Therefore, the District has concluded that the volumetric fuel flow meter requirement is not applicable or necessary for this type of unit and can be removed. The requirement for the facility to maintain records of the daily amount of waste gas and/or raw digester gas consumed by the combustion device will also be removed from the permit.

There are no emission increases associated with the proposed change to this digester gas treatment system.

Existing PTO Changes:

Existing PTO condition 15 has been removed as there are no underlying applicable requirements for the facility to monitor and record the amount of waste gas combusted in the digester gas treatment system.

Existing PTO conditions 16 and 17 have been revised and combined to remove the requirment to keep daily records of the amount of waste gas and/or raw digester gas consumed by the combustion device and have been included as condition 15 of this revised permit.

VII. COMPLIANCE

District Rule 2520, Section 6.0 describes the source's ability to make changes including significant permit modification. This modification does not meet the minor permit modification criteria pursuant to Section 3.20 described as follows.

- 1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
- 2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions:
- 3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- 4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
- Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act: and
- 6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of Section 11.3 by including;

- 1. The identification of the source, the name and address of the permit holder, the activities and emissions change involved in the permit action;
- 2. The name and address of the District, the name and telephone number of District staff to contact for additional information;
- 3. The availability, upon request, of a statement that sets forth the legal and factual basis for the proposed permit conditions;
- 4. The location where the public may inspect the complete application, the District analysis, the proposed permit, and all relevant supporting materials;

- 5. A statement that the public may submit written comments regarding the proposed decision within at least 30 days from the date of publication and a brief description of commenting procedures, and
- 6. A statement that members of the public may request the APCO or his designee to preside over a public hearing for the purpose of receiving oral public comment, if a hearing has not already been scheduled. The APCO shall provide notice of any public hearing scheduled to address the proposed decision at least 30 days prior to such hearing;

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permit C-535-26-3
- B. Previous Title V Operating Permit C-535-26-0
- C. Application

ATTACHMENT A

Proposed Modified Title V Operating Permit C-535-26-3

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-535-26-3

EXPIRATION DAITE 01/3/1/2010

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: REMOVE NON-RESETTABLE, TOTALIZING FUEL METER REQUIREMENT FROM WASTE GAS COMBUSTION DEVICE

PERMIT UNIT REQUIREMENTS

- 1. 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
- 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 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 0.084 lb-VOC/MMBtu; or PM10 0.016 lb/MMBtu.
 [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The H2S content of the digester gas processed through this gas treatment system shall not exceed 200 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. 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, 9.3.2] Federally Enforceable Through Title V Permit
- 6. 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
- 7. 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 and 4311, 6.4.2] Federally Enforceable Through Title V Permit
- 8. NOx emissions for source test purposes shall be determined using EPA Method 19. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 9. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 10. VOC emissions for source test purposes shall be determined using EPA Method 18 or 25. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: FRESNO/CLOVIS REGIONAL WWTP
Location: 5607 W JENSEN AVE,FRESNO, CA 93706
C-535-26-3 Dec 1 2015 1:43PM - BROWND

- 12. 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
- 13. The combustion zone of the combustion device shall be maintained at a minimum of 1,400 degrees Fahrenheit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. The combustion device shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 15. The permittee shall maintain records of: (1) the daily combustion device temperature readings; (2) copy of source test reports; and (3) copies of all annual reports submitted to the District. [District 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 16. 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, 9.4.2] Federally Enforceable Through Title V Permit

These terms and condition e Facility-wide Permit to Operate.

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

ATTACHMENT B

Previous Title V Operating Permit C-535-26-0

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-535-26-0 EXPIRATION DATE: 01/31/2016

EQUIPMENT DESCRIPTION:

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

PERMIT UNIT REQUIREMENTS

- 1. 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
- 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 4102]
- 3. 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 0.084 lb-VOC/MMBtu; or PM10 0.016 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The H2S content of the digester gas processed through this gas treatment system shall not exceed 200 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. 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, 9.3.2] Federally Enforceable Through Title V Permit
- 6. 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
- 7. 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 and 4311, 6.4.2] Federally Enforceable Through Title V Permit
- 8. NOx emissions for source test purposes shall be determined using EPA Method 19. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 9. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 10. VOC emissions for source test purposes shall be determined using EPA Method 18 or 25. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. 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
- 12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: FRESNO/CLOVIS REGIONAL WWTP
Location: 5607 W JENSEN AVE,FRESNO, CA 93706
C-535-26-0 Dec 1 2015 9 44AM - BROWND

- 13. The combustion zone of the combustion device shall be maintained at a minimum of 1,400 degrees Fahrenheit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. The combustion device shall be equipped with a continuous temperature monitoring and recording device, in operation at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 15. 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
- 16. The permittee shall maintain accurate daily records of the thermal oxidizer combustion temperature. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain records of: (1) daily amount of waste gas and/or raw digester gas consumed by the combustion device, in standard cubic feet; (2) copy of annual source test reports; and (3) copies of all annual reports submitted to the District. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 18. 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, 9.4.2] Federally Enforceable Through Title V Permit

ATTACHMENT C

Application



[] ADMINISTRATIVE AMENDMENT

San Joaquin Valley Air Pollution Contropping VEDAIR

www.valleyair.org

NOV 3 0 2015

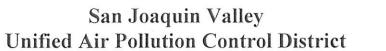
Permit Application For:

[] MINOR MODIFICATION

Permits Services
[X] SIGNIFICASUPARODIFICATION

1. PERMIT TO BE ISSUED TO: FRESNO – CLOVIS REGIONAL WASTEWATER RECLAMATION FACILITY				
2. MAILING ADDRESS:				
STREET/P.O. BOX: 5607 W. JENSEN AVE				
CITY: FRESNO	STATE: CA	9-DIGIT ZIP CODE: 93706-9458		
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:		INSTALLATION DATE:		
STREET: 5607 W. JENSEN AVE.	CITY: FRESNO	5.9.12		
NW % SECTION FRESNO TOWNSHI	P SOUTH RANGE 19 EAST	-		
4. GENERAL NATURE OF BUSINESS: WASTEWATER TREATMENT				
DESCRIPTION OF EQUIPMENT OR MOD (include Permit #'s if known, and use addition	DIFICATION FOR WHICH APPLICATION IS M nal sheets if necessary)	ADE		
C-535-26-0 — 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 Significant Modification Application is to remove Condition #17 from permit: 17. 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				
6. TYPE OR PRINT NAME OF APPLICANT: RAY ARTHUR		TITLE OF APPLICANT: PROJECT MANAGER – AIR RESOURCES		
7. SIGNATURE OF APPLICANT:	DATE: 11.30.15	PHONE: 559.621.5266 FAX: 559.498.1700 EMAIL: ray.arthur@fresno.gov		
For APCD Use Only:				
DATE STAMP	FILING FEE RECEIVED : \$	CHECK#:		
	DATE PAID:			
	PROJECT NO:	FACILITY ID:		







TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appr	opriate box)	
[X] SIGNIFICANT PERMIT MODIFICATION [] MINOR PERMIT MODIFICATION	[] ADMINISTRATIVE AMENDMENT	
COMPANY NAME: FRESNO-CLOVIS REGIONAL RECLAMATION FACILITY	WASTEWATER	FACILITY ID: C = 535
Type of Organization:[] Corporation [] Sole Own	ership [X] Government [] Pa	artnership [] Utility
2. Owner's Name: CITY OF FRESNO		
3. Agent to the Owner:		
Based on information and belief formed after recontinue to comply with the applicable federal Based on information and belief formed after recomply with applicable federal requirement(s) Corrected information will be provided to the I information has been submitted. Based on information and belief formed after reapplication package, including all accompanying complete.	requirement(s). easonable inquiry, the equipment that will become effective during District when I become aware that easonable inquiry, information and	identified in this application will the permit term, on a timely basis t incorrect or incomplete
I declare, under penalty of perjury under the laws of the	state of California, that the forgoi	ing is correct and true:
My Sose	11.20.15	
Signature of Responsible Official	Date	CONTACTOR CONTENTS AND
RICK STAGGS		
Name of Responsible Official (please print))	
OPERATIONS MANAGER		
Title of Responsible Official (please print)		