



JUN 27 2016

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

**Re: Notice of Final Action - Title V Permit Renewal  
District Facility # C-535  
Project # 1151454**

Dear Mr. Author:

The District has issued the Final Renewed Title V Permit for Fresno/Clovis Regional WWTP. The preliminary decision for this project was made on 5/5/16. No comments were received subsequent to the District preliminary decision.

The public notice for issuance of the Final Title V Permit will be published approximately three days from the date of this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

*Ar*   
Arnaud Marjollet  
Director of Permit Services

Enclosures

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

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**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



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

## Notice of Permit Issuance

The enclosed permit unit requirements authorize the operation of the equipment as described. These permit unit requirements supersede any and all previous permits for the specified equipment.\* Please insert these documents into the Facility Permit to Operate, and post copies on or near the equipment as required by District Rule 2010.

Please contact any of our Small Business Assistance (SBA) staff at the numbers below if you have any questions:

Modesto:	(209) 557-6446
Fresno:	(559) 230-5888
Bakersfield:	(661) 392-5665

\*Failure to comply with the permit unit requirements may result in enforcement action.

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

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**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585



# Permit to Operate

**FACILITY:** C-535 **EXPIRATION DATE:** 01/31/2021  
**LEGAL OWNER OR OPERATOR:** FRESNO/CLOVIS REGIONAL WWTP  
**MAILING ADDRESS:** 5607 W JENSEN AVE  
FRESNO, CA 93706-9458  
**FACILITY LOCATION:** 5607 W JENSEN AVE  
FRESNO, CA 93706  
**FACILITY DESCRIPTION:** WASTEWATER RECLAMATION FACILITY

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin  
Executive Director / APCO

Arnaud Marjollet  
Director of Permit Services

# San Joaquin Valley Air Pollution Control District

FACILITY: C-535-0-2

EXPIRATION DATE: 01/31/2021

## FACILITY-WIDE REQUIREMENTS

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1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1 and Fresno County Rule 110] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0 and Fresno County Rule 110] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: FRESNO/CLOVIS REGIONAL WWTP  
Location: 5607 W JENSEN AVE, FRESNO, CA 93706  
C-535-0-2 : Jun 22 2016 9:25AM - THAOSE

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8021 and 8011] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8041 and 8011] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8051 and 8011] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8061 and 8011] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8071 and 8011] Federally Enforceable Through Title V Permit
35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Fresno County Rules 110, 201, 202, 203, 204, 208, 209, 401, and 423. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. Should the facility, as defined in 40 CFR 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR Part 70. [40 CFR Part 68] Federally Enforceable Through Title V Permit
43. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin March 23 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-6-14

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

16.7 MMBTU/HR CLEAVER-BROOKS MODEL CBI-700-400 DIGESTER GAS-FIRED BOILER WITH AN ALZETA MODEL CSB167R ULTRA LOW NOX BURNER AND SULFATREAT DIGESTER GAS TREATMENT SYSTEM

## PERMIT UNIT REQUIREMENTS

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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] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO<sub>2</sub>. [District Rules 4201 and 4301, 5.1] Federally Enforceable Through Title V Permit
3. The boiler may only be fired on digester gas except pilot light which may be fueled with PUC natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from the boiler shall not exceed any of the following limits: 9 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.011 lb-NO<sub>x</sub>/MMBtu, 0.026 lb-SO<sub>x</sub>/MMBtu, 0.0048 lb-PM<sub>10</sub>/MMBtu, 100 ppmvd CO @ 3% O<sub>2</sub> or 0.061 lb-CO/MMBtu, or 0.004 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Digester gas fuel consumption shall not exceed 730,400 cubic feet per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The sulfur content of the fuel used by the boiler shall not exceed 5 gr/100 dscf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
7. Daily testing of digester gas is required so as to not exceed an average of 79.6 ppm as hydrogen sulfide (H<sub>2</sub>S). Corrections shall be made, and re-tested within three (3) hours in order to maintain average below 79.6 ppm. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. The sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D-1072, D-3031, D-4084, D3246, D-4810, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rules 2520, 9.3.2, and 4320] Federally Enforceable Through Title V Permit
9. The boiler shall be equipped with an operational non-resettable, totalizing mass or volumetric flow meter in the digester gas fuel supply line. [District Rules 2201 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
10. Source testing to measure digester gas-combustion NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] 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.



12. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
14. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
16. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
18. 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
19. 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
20. NO<sub>x</sub> emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Stack gas oxygen (O<sub>2</sub>) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
24. Records of daily fuel consumption and daily sulfur testing results shall be maintained. [District Rules 1070, 2520, 9.3.2, and 40 CFR 60.48 (c)(g)] 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.

25. 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, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-9-3

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

36.3 MMBTU/HR JOHN ZINK COMPANY WASTE GAS FLARE

## PERMIT UNIT REQUIREMENTS

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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 4102]
2. The flare shall be operated in a manner preventing the emission of noxious odors or other nuisances. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The waste gas flare system shall be specifically designed for burning wastewater treatment plant digester gas, and alternate fuel may be used as pilot fuel. [District NSR Rule] Federally Enforceable Through Title V Permit
5. 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
6. The flare system shall have continuous readout and recording of gas flow rate and stack temperature. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Flare flue gas temperature shall be maintained to at least 1,400 °F and 0.6 seconds minimum residence time. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Total volume of gaseous fuel flared shall not exceed 1,584,000 scf per day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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
10. 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
11. Daily testing of digester gas is required so as to not exceed an average of 200 ppm as hydrogen sulfide (H<sub>2</sub>S). Corrections shall be made, and re-tested within 3 hours in order to maintain average below 200 ppm. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Emissions shall not exceed any of the following limits: 0.18 lb PM<sub>10</sub>/hr, 1.8 lb SO<sub>x</sub>/hr, 2.2 lb NO<sub>x</sub>/hr, or 10.5 lb CO/hr. [District NSR Rule and Rule 4311, 5.7] Federally Enforceable Through Title V Permit
13. VOC emissions shall not exceed 0.0027 lb-VOC/MMBtu. [District NSR Rule and Rule 4311, 5.7] Federally Enforceable Through Title V Permit
14. Source testing to measure digester gas-combustion NO<sub>x</sub> 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

15. 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
16. 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]
17. 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
18. 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
19. 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
20. The sulfur content of gas being flared shall be determined using ASTM D-1072, D-3031, D-4084, D 3246, D-4810, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. 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, 9.3.2] Federally Enforceable Through Title V Permit
23. Daily records of total gas flared shall be maintained. [District NSR Rule and 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of flare maintenance, inspections and repair shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. Records of daily sulfur testing results shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Records of all source tests shall be maintained. [District Rule 4311, 6.2] Federally Enforceable Through Title V Permit
27. 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

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-10-2

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

2518 BHP CATERPILLAR MODEL 3516 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 1750 KW ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District NSR Rule, 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
6. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The engine shall be equipped with a turbocharger and with an aftercooler or intercooler. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
9. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District NSR Rule, 4701, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
11. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
12. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] 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.

13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702] Federally Enforceable Through Title V Permit
14. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
15. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Fresno County Rule 406. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
16. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
17. 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 Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-11-2

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

140 BHP CATERPILLAR MODEL #3116-DIT DIESEL- FIRED TURBOCHARGED EMERGENCY IC ENGINE #1  
POWERING A WATER TRANSFER PUMP

## PERMIT UNIT REQUIREMENTS

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1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 2520, 9.3.2, 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District NSR Rule, 4701, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
7. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
8. NOx emission rate shall not exceed 6.0 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
10. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
11. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] 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.

12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702] Federally Enforceable Through Title V Permit
13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Fresno County Rule 406. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. 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 Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-12-2

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

140 HP CATERPILLAR MODEL #3116-DIT DIESEL-FIRED TURBOCHARGED EMERGENCY IC ENGINE #2 SERVING A WATER TRANSFER PUMP

## PERMIT UNIT REQUIREMENTS

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1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 2520, 9.3.2, 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District NSR Rule, 4701, 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
7. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
8. NOx emission rate shall not exceed 6.0 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
10. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
11. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] 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.

12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702] Federally Enforceable Through Title V Permit
13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Fresno County Rule 406. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. 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 Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-13-2

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

150 HP ODOR CONTROL SCRUBBING SYSTEM INCLUDING THREE(3) 50 HP RJ ENVIRONMENTAL PACKED TOWER CAUSTIC SCRUBBERS EACH EQUIPPED WITH A KIMRE MIST ELIMINATOR MODEL B-GON

## PERMIT UNIT REQUIREMENTS

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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 NSR Rule] Federally Enforceable Through Title V Permit
2. Maximum design influent flow rate through headworks shall not exceed 106 MGD. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The total emissions from this operation shall not exceed 0.075 pounds VOC per MGD of influent flow. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Scrubbers shall be maintained and operated according to manufacturer's specifications. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Scrubber liquid to gas ratio shall be observed and recorded weekly during operation of this unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Records of scrubber liquid to gas ratio shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Records of daily influent flow rate through headworks shall be maintained and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. 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 Rule 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-17-2

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

455 BHP CUMMINS MODEL NTA855 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ONAN MODEL 350DFCC, 350 KW ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801, Fresno County Rule 406, and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District NSR Rule, 4701 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. 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 NSR Rule] Federally Enforceable Through Title V Permit
7. Emissions shall not exceed 5.61 g NOx/bhp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
9. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
10. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
11. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
12. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] 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.

14. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702] Federally Enforceable Through Title V Permit
15. 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 Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
16. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Fresno County Rule 406. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-18-17

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

3.377 MW ALLISON MODEL 501 KB-5 DIGESTER/NATURAL GAS-FIRED TURBINE GENERATOR #1 WITH WATER INJECTION AND SELECTIVE CATALYTIC REDUCTION WITH AMMONIA INJECTION, HEAT RECOVERY STEAM GENERATOR, A 2.25 MW STEAM TURBINE SHARED WITH C-535-19, AND A PREDICTIVE EMISSION MONITORING SYSTEM (PEMS)

## PERMIT UNIT REQUIREMENTS

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1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
3. While dormant, normal source testing shall not be required. [District Rule 2080]
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
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 2201] Federally Enforceable Through Title V Permit
8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
9. The gas-fired turbines shall be fired on natural gas or digester gas or any combination (blend) of natural gas and digester gas. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The total sulfur content of the natural gas combusted by this unit shall not exceed 1.0 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The H<sub>2</sub>S content of the digester gas combusted by this unit shall not exceed 200 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The owner or operator shall install, operate and maintain in calibration a system which continuously measures and records: the fuel consumption and the ratio of water to fuel being fired in the turbine. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
13. During periods of start-up or shutdown, turbine exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 5.74 lb/hr, SO<sub>x</sub> - 2.07 lb/hr, PM<sub>10</sub> 1.34 lb/hr, CO - 27.95 lb/hr, or VOC - 0.02 lb/hr. [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.

14. Emission rates from this unit, except during start-up and shutdown, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 0.95 lb/hr and 5 ppmvd @ 15% O<sub>2</sub>; SO<sub>x</sub> (as SO<sub>2</sub>) - 2.07 lb/hr; PM<sub>10</sub> - 1.34 lb/hr; CO - 27.95 lb/hr and 188.0 ppmvd @ 15% O<sub>2</sub>; or VOC (as methane) - 0.02 lb/hr. [District Rules 2201 and 4703, 40 CFR 60.332(a)(2) and 40 CFR 60.333(a) & (b)] Federally Enforceable Through Title V Permit
15. Emissions from this unit (including emissions during start-up and shutdown), shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 51.5 lb/day; SO<sub>x</sub> (as SO<sub>2</sub>) - 49.7 lb/day; PM<sub>10</sub> - 32.2 lb/day; CO - 670.8 lb/day; or VOC - 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emissions from this unit (including emissions during start-up and shutdown), shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 9,299 lb/year; SO<sub>x</sub> (as SO<sub>2</sub>) - 18,141 lb/year; PM<sub>10</sub> - 11,753 lb/year; CO - 244,842 lb/year; or VOC - 183 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 1.37 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> (based on a 24 hour rolling average). [District Rule 2201] Federally Enforceable Through Title V Permit
18. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1.) calculate the daily ammonia emissions using the following equation:  $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$ , where a = average ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O<sub>2</sub>. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation; 4.) The permittee may utilize draeger tubes to measure the ammonia in the exhaust stack. If this option is chosen, the permittee shall monitor and record the stack concentration weekly using a portable emissions monitor that meets District specifications. If compliance with the ammonia emissions is demonstrated for eight consecutive weeks, then the monitoring frequency will be reduced to monthly. If deviations are observed in two consecutive months, monitoring shall revert to weekly until eight consecutive weeks show no deviations. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within one day of restarting the unit unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the week if on a weekly monitoring schedule. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The duration of each startup or shutdown event shall not exceed two hours. Start-up and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
21. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
22. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB policy document titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. Source testing to measure the NO<sub>x</sub>, CO, and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) shall be conducted at least once every twelve months. [District Rules 2201 and 4703] 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.

24. 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
25. The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E or 20 or ARB Method 100, CO - EPA Method 10 or 10B or ARB Method 100, O<sub>2</sub> - EPA Method 3, 3A, or 20 or ARB Method 100, and ammonia - BAAQMD Method ST-1B. NO<sub>x</sub> test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081 and 4703 and 40 CFR 60.335] Federally Enforceable Through Title V Permit
26. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit
27. 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
28. When the unit is fired solely on PUC-regulated natural gas, maintain on file copies of the natural gas bills. [District Rule 2520 and 40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
29. When the unit is not fired solely on PUC-regulated natural gas, the sulfur content of the fuel shall be tested weekly except that if compliance with the fuel sulfur content limit in this permit has been demonstrated for 8 consecutive weeks, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content limit in this permit, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520 and 40 CFR 60.334(i)(3)] Federally Enforceable Through Title V Permit
30. When the unit is not fired solely on PUC-regulated natural gas, the sulfur content of the fuel being fired in the turbine shall be determined using ASTM method D-1072, D-4084, D-3246 or D-4810. [District Rule 1081 and 40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
31. When the unit is not fired solely on PUC-regulated natural gas, the operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the turbine exceeds 0.8% by weight. [40 CFR 60.334(j)] Federally Enforceable Through Title V Permit
32. The owner or operator shall install, certify, maintain, operate and quality-assure a Predictive Emission Monitoring System (PEMS) which continuously monitors and records the exhaust gas NO<sub>x</sub>, CO and O<sub>2</sub> concentrations. Predictive emissions monitor(s) shall be capable of monitoring emissions during normal operating conditions, and during startups and shutdowns provided the PEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of PEMS cannot be demonstrated during startup conditions, PEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this permit. [District Rules 1080, 2201, and 4703 and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
33. Operation and calibration of the PEMS equipment shall be performed in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 16. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The PEMS sensor evaluation system shall check the integrity of each input at least once per day. [District Rule 1080] Federally Enforceable Through Title V Permit
35. The owner/operator shall perform a relative accuracy test audit (RATA) for the NO<sub>x</sub>, CO and O<sub>2</sub> PEMS at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the predictive emission monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix B, Performance Specification 16. [District Rule 1080] 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.



36. The owner/operator shall perform a relative accuracy audit (RAA) of the PEMS at least once each calendar quarter, except during quarters in which a RATA is performed, in accordance with EPA guidelines. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
37. If a PEMS passes all quarterly RAAs in the first year and also passes the subsequent yearly RATA in the second year, the permittee may elect to perform a single mid-year RAA in the second year in place of the quarterly RAAs as specified in Section 9.3 of EPA Performance Specification 16. This option may be repeated, but only until the PEMS fails either a mid-year RAA or a yearly RATA. When such a failure occurs, the operator must resume quarterly RAAs in the quarter following the failure and continue conducting quarterly RAAs until the PEMS successfully passes both a year of quarterly RAAs and a subsequent RATA. [District Rule 1080] Federally Enforceable Through Title V Permit
38. Results of continuous emissions monitoring equipment shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
39. The facility shall maintain equipment, facilities, and systems compatible with the District's continuous emission monitor data polling software system and shall make PEMS data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
40. Upon notice by the District that the facility's PEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the PEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
41. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit
42. The owner or operator shall submit a written report of PEMS operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess emissions, nature and the cause of excess (if known), corrective actions taken and preventative measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period and used to determine compliance with an emissions standard; Applicable time and date of each period during which the PEMS was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
43. When the turbine is operating and it is determined that the predictive emission monitoring system (PEMS) for NOx and CO is not operating properly, the permittee shall notify the District of the breakdown condition in accordance with Rule 1100 (Equipment Breakdown). During the breakdown period, the facility shall demonstrate emissions compliance by monitoring and recording hourly NOx and CO concentrations utilizing a portable analyzer that meets District specifications. The facility shall operate the portable analyzer providing data to the District for a maximum of 96 hours per breakdown occurrence. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
44. Portable analyzer readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4703] 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.

45. If the NO<sub>x</sub> and/or CO concentrations, as measured by the permittee with a portable analyzer, exceed the permitted emission limits, the permittee shall notify the District and return the NO<sub>x</sub> and CO concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emissions limits after eight (8) hours, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with the permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
46. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
47. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any PEM system that has been installed pursuant to District Rule 1080, and emission measurements. [District Rules 1080 and 4703 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
48. Records shall be maintained on the quality and accuracy of all instruments to verify compliance. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
49. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-19-14

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

3.377 MW ALLISON MODEL 501 KB-5 DIGESTER/NATURAL GAS-FIRED TURBINE GENERATOR #2 WITH WATER INJECTION AND SELECTIVE CATALYTIC REDUCTION WITH AMMONIA INJECTION, HEAT RECOVERY STEAM GENERATOR, A 2.25 MW STEAM TURBINE SHARED WITH C-535-18, AND A PREDICTIVE EMISSION MONITORING SYSTEM (PEMS)

## PERMIT UNIT REQUIREMENTS

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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] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The gas-fired turbines shall be fired on natural gas or digester gas or any combination (blend) of natural gas and digester gas. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The total sulfur content of the natural gas combusted by this unit shall not exceed 1.0 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The H<sub>2</sub>S content of the digester gas combusted by this unit shall not exceed 200 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The owner or operator shall install, operate and maintain in calibration a system which continuously measures and records: the fuel consumption and the ratio of water to fuel being fired in the turbine. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
7. During periods of start-up or shutdown, turbine exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 5.74 lb/hr, SO<sub>x</sub> - 2.07 lb/hr, PM<sub>10</sub> 1.34 lb/hr, CO - 27.95 lb/hr, or VOC - 0.02 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Emission rates from this unit, except during start-up and shutdown, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 0.95 lb/hr and 5 ppmvd @ 15% O<sub>2</sub>; SO<sub>x</sub> (as SO<sub>2</sub>) - 2.07 lb/hr; PM<sub>10</sub> - 1.34 lb/hr; CO - 27.95 lb/hr and 188.0 ppmvd @ 15% O<sub>2</sub>; or VOC (as methane) - 0.02 lb/hr. [District Rules 2201 and 4703, 40 CFR 60.332(a)(2) and 40 CFR 60.333(a) & (b)] Federally Enforceable Through Title V Permit
9. Emissions from this unit (including emissions during start-up and shutdown), shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 51.5 lb/day; SO<sub>x</sub> (as SO<sub>2</sub>) - 49.7 lb/day; PM<sub>10</sub> - 32.2 lb/day; CO - 670.8 lb/day; or VOC - 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions from this unit (including emissions during start-up and shutdown), shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 9,299 lb/year; SO<sub>x</sub> (as SO<sub>2</sub>) - 18,141 lb/year; PM<sub>10</sub> - 11,753 lb/year; CO - 244,842 lb/year; or VOC - 183 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 1.37 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> (based on a 24 hour rolling average). [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.

12. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1.) calculate the daily ammonia emissions using the following equation:  $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$ , where a = average ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation; 4.) The permittee may utilize draeger tubes to measure the ammonia in the exhaust stack. If this option is chosen, the permittee shall monitor and record the stack concentration weekly using a portable emissions monitor that meets District specifications. If compliance with the ammonia emissions is demonstrated for eight consecutive weeks, then the monitoring frequency will be reduced to monthly. If deviations are observed in two consecutive months, monitoring shall revert to weekly until eight consecutive weeks show no deviations. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within one day of restarting the unit unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the week if on a weekly monitoring schedule. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The duration of each startup or shutdown event shall not exceed two hours. Start-up and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
14. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
15. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
16. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB policy document titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to measure the NOx, CO, and NH3 emission rates (lb/hr and ppmvd @ 15% O2) shall be conducted at least once every twelve months. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
18. 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
19. The following test methods shall be used: NOx - EPA Method 7E or 20 or ARB Method 100, CO - EPA Method 10 or 10B or ARB Method 100, O2 - EPA Method 3, 3A, or 20 or ARB Method 100, and ammonia - BAAQMD Method ST-1B. NOx test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081 and 4703 and 40 CFR 60.335] Federally Enforceable Through Title V Permit
20. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] 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.

21. 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
22. When the unit is fired solely on PUC-regulated natural gas, maintain on file copies of the natural gas bills. [District Rule 2520 and 40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
23. When the unit is not fired solely on PUC-regulated natural gas, the sulfur content of the fuel shall be tested weekly except that if compliance with the fuel sulfur content limit in this permit has been demonstrated for 8 consecutive weeks, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content limit in this permit, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520 and 40 CFR 60.334(i)(3)] Federally Enforceable Through Title V Permit
24. When the unit is not fired solely on PUC-regulated natural gas, the sulfur content of the fuel being fired in the turbine shall be determined using ASTM method D-1072, D-4084, D-3246 or D-4810. [District Rule 1081 and 40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
25. When the unit is not fired solely on PUC-regulated natural gas, the operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the turbine exceeds 0.8% by weight. [40 CFR 60.334(j)] Federally Enforceable Through Title V Permit
26. The owner or operator shall install, certify, maintain, operate and quality-assure a Predictive Emission Monitoring System (PEMS) which continuously monitors and records the exhaust gas NO<sub>x</sub>, CO and O<sub>2</sub> concentrations. Predictive emissions monitor(s) shall be capable of monitoring emissions during normal operating conditions, and during startups and shutdowns provided the PEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of PEMS cannot be demonstrated during startup conditions, PEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this permit. [District Rules 1080, 2201, and 4703 and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
27. Operation and calibration of the PEMS equipment shall be performed in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 16. [District Rule 1080] Federally Enforceable Through Title V Permit
28. The PEMS sensor evaluation system shall check the integrity of each input at least once per day. [District Rule 1080] Federally Enforceable Through Title V Permit
29. The owner/operator shall perform a relative accuracy test audit (RATA) for the NO<sub>x</sub>, CO and O<sub>2</sub> PEMS at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the predictive emission monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix B, Performance Specification 16. [District Rule 1080] Federally Enforceable Through Title V Permit
30. The owner/operator shall perform a relative accuracy audit (RAA) of the PEMS at least once each calendar quarter, except during quarters in which a RATA is performed, in accordance with EPA guidelines. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
31. If a PEMS passes all quarterly RAAs in the first year and also passes the subsequent yearly RATA in the second year, the permittee may elect to perform a single mid-year RAA in the second year in place of the quarterly RAAs as specified in Section 9.3 of EPA Performance Specification 16. This option may be repeated, but only until the PEMS fails either a mid-year RAA or a yearly RATA. When such a failure occurs, the operator must resume quarterly RAAs in the quarter following the failure and continue conducting quarterly RAAs until the PEMS successfully passes both a year of quarterly RAAs and a subsequent RATA. [District Rule 1080] Federally Enforceable Through Title V Permit
32. Results of continuous emissions monitoring equipment shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] 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.

33. The facility shall maintain equipment, facilities, and systems compatible with the District's continuous emission monitor data polling software system and shall make PEMS data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
34. Upon notice by the District that the facility's PEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the PEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
35. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit
36. The owner or operator shall submit a written report of PEMS operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess emissions, nature and the cause of excess (if known), corrective actions taken and preventative measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period and used to determine compliance with an emissions standard; Applicable time and date of each period during which the PEMS was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
37. When the turbine is operating and it is determined that the predictive emission monitoring system (PEMS) for NOx and CO is not operating properly, the permittee shall notify the District of the breakdown condition in accordance with Rule 1100 (Equipment Breakdown). During the breakdown period, the facility shall demonstrate emissions compliance by monitoring and recording hourly NOx and CO concentrations utilizing a portable analyzer that meets District specifications. The facility shall operate the portable analyzer providing data to the District for a maximum of 96 hours per breakdown occurrence. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. Portable analyzer readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
39. If the NOx and/or CO concentrations, as measured by the permittee with a portable analyzer, exceed the permitted emission limits, the permittee shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emissions limits after eight (8) hours, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with the permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
40. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
41. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any PEM system that has been installed pursuant to District Rule 1080, and emission measurements. [District Rules 1080 and 4703 and 40 CFR 60.8(d)] 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.

42. Records shall be maintained on the quality and accuracy of all instruments to verify compliance. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
43. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-24-2

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

125 BHP JOHN DEERE MODEL 4045HF275 TIER 3 CERTIFIED TRANSPORTABLE DIESEL-FIRED IC ENGINE  
POWERING AN AIR COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District NSR Rule and 4801 and 17 CCR 93116] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93116] Federally Enforceable Through Title V Permit
5. The only approved storage and operational location for this IC engine shall be Facility C-535 at 5607 W Jensen Avenue, Fresno. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This transportable IC engine shall not be attached to a foundation or operated at any location at this facility for more than 12 consecutive months. The period during which the engine is maintained at a storage location shall be excluded from the residency time determination. [District Rule 4701, 40 CFR Part 89, 13 CCR 2421, and 17 CCR 93116] Federally Enforceable Through Title V Permit
7. Total annual NOx emissions combined from the waste gas flare (C-535-9) and the transportable diesel-fired IC engine (C-535-24) shall not exceed 19,272 pounds in any calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Total annual NOx emissions combined from the waste gas flare (C-535-9) and the transportable diesel-fired IC engine (C-535-24) shall be calculated as follows: Annual NOx Emissions = [(1.13 x IC Engine Annual Hours of Operation (hours per year)) + (60.6 x Waste Gas Flare's Annual Fuel Combusted (MMscf per year))]. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Emissions from this IC engine shall not exceed any of the following limits: 4.10 g-NOx/bhp-hr, 0.75 g-CO/bhp-hr, or 0.30 g-VOC/bhp-hr. [District NSR Rule and 17 CCR 93116] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed 0.19 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District NSR Rule, 4102, and 17 CCR 93116] Federally Enforceable Through Title V Permit
11. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
12. During periods of operation, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. The permittee shall maintain an engine-operating log that shall include the following: daily records of the date, location at the facility, operational time; a record of the cumulative annual hours of operation of the engine; and records of operational characteristics monitoring. [District NSR Rule and 4702] Federally Enforceable Through Title V Permit
14. 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 Rule 4702 and 17 CCR 93116] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-26-3

**EXPIRATION DATE:** 01/31/2021

**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

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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: NO<sub>x</sub> - 0.06 lb/MMBtu; CO - 0.20 lb/MMBtu; 20 ppmv VOC @ 3% O<sub>2</sub> (as hexane) or 0.084 lb-VOC/MMBtu; or PM<sub>10</sub> - 0.016 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The H<sub>2</sub>S 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 NO<sub>x</sub> 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 H<sub>2</sub>S content limit shall be conducted quarterly. Once eight (8) consecutive quarterly tests show compliance, the H<sub>2</sub>S content testing frequency may be reduced to once every calendar year. If an annual test shows violation of the H<sub>2</sub>S 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 Rules 1081 and 4311, 6.4.2] Federally Enforceable Through Title V Permit
8. NO<sub>x</sub> 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 H<sub>2</sub>S 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

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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 Rule 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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-535-28-0

**EXPIRATION DATE:** 01/31/2021

**EQUIPMENT DESCRIPTION:**

UNCONFINED ABRASIVE BLASTING OPERATION WITH A 600 LB SARCCO NATIONAL BOARD #34188 BLASTING POT (POWERED BY ENGINE PERMITTED UNDER C-535-24)

## PERMIT UNIT REQUIREMENTS

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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. [Rule 4102]
2. The blasting operations shall be carried out in a manner to prevent any nuisances. [District Rule 4102]
3. All abrasive blasting shall be conducted in accordance with California Code of Regulations Title 17, Subchapter 6, Sections 92000 through 92540. [92000 through 92540 CCR]
4. A used certified abrasive shall not be considered certified for reuse unless the abrasive conforms to its original cut-point fineness. [92530 CCR]
5. Unconfined abrasive blasting operations shall not discharge air contaminants into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann 2 or equivalent to 40% opacity. [92200 CCR]
6. Except as otherwise provided in this permit, abrasive blasting shall be conducted within a permanent building unless steel or iron shot/grit is used. [92500 CCR]
7. Abrasive blasting of items exceeding 8 feet in any dimension, or of a surface situated at its permanent location, or no further away from its permanent location than is necessary to allow the surface to be blasted, may be performed outside a permanent building only if one of the following is used: steel or iron shot/grit; abrasives certified by CARB for permissible dry outdoor blasting; wet abrasive blasting, hydroblasting; or vacuum blasting. [92500 CCR]
8. Unconfined abrasive blasting shall be limited to 5 hours in any one day and 250 hours per rolling 12-month period. [District Rule 4102]
9. Operator shall record the date and hours when unconfined blasting occurs. [District Rules 1070 and 4102]
10. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 1070 and 4102]

These terms and conditions are part of the Facility-wide Permit to Operate.