



AUG 09 2016

Adean Valenzuela
Aera Energy LLC
PO Box 11164
Bakersfield, CA 93389-1164

**Re: Notice of Final Action - Minor Title V Permit Modification
District Facility # C-1121
Project # C-1160908**

Dear Ms. Valenzuela:

The Air Pollution Control Officer has modified the Title V permit for Aera Energy LLC by incorporating Authorities to Construct C-1121-17-27, -18-27, -19-27 and -41-27. The modification consists of installing a fourth scrubber vessel, and did not result in a change to permit conditions or equipment description.

Enclosed is the modified Title V permit. The application and proposal were sent to US EPA Region IX on April 26, 2016. No comments were received following the District's preliminary decision on this project.

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

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:ao

Enclosures

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

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

Central Region (Main Office)
1900 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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1121-17-28

EXPIRATION DATE: 12/31/2016

SECTION: 26 TOWNSHIP: 19S RANGE: 15E

EQUIPMENT DESCRIPTION:

S-9, 62.5 MMBTU/HR THERMOTICS, NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH COEN QLN ULN BURNER AND FLUE GAS RECIRCULATION SERVED BY LO-COST H2S SCAVENGER SYSTEM AND SULFATREAT VESSELS SHARED WITH PERMIT UNITS C-1121-18, '-19 AND '-41

PERMIT UNIT REQUIREMENTS

1. Fuel consumption for the steam generator shall not exceed 1,500 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Combined quantity of well vent and tank vapor recovery gases combusted within steam generators '-17, '-18, '-19, and '-41, from the four CVR systems (C-1121-38, -39, -114, & -116) and the section 32 TVR system shall not exceed 1,300,000 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas, vapor recovery gas, or a combination of natural gas and vapor recovery gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. Lo-Cost H2S scavenging system shall be used whenever vapor recovery gas is fired in this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following limits: NOx (as NO2): 14 ppmv @ 3% O2 or 0.017 lb/MMBtu (25.5 lb/day), CO: 43 ppmv @ 3%O2 or 0.032 lb/MMBtu (48.0 lb/day), PM10: 0.0076 lb/MMBtu (11.4 lb-PM10/day), or VOC: 0.008 lb/MMBtu (12.0 lb/day). [District Rules 2201, 4201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. When fired on PUC quality natural gas, the SOx emissions rate shall not exceed 0.00285 lb/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. When fired on gases other than PUC quality natural gas, the SOx emissions rate shall not exceed 9 ppmv @ 3% O2 or 0.015 lb/MMBtu (22.8 lb/day). [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
10. Combined emissions of SOx, calculated as SO2, from the steam generators and the flare (C-1121-17, -18, -19, -41, & -168) shall not exceed 28,580 lb/yr. [District Rule 2201]
11. The sulfur content of treated waste gas exiting the H2S Scavenger System shall be determined on a daily basis by gas detector tube sampling. [District Rules 2201 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. The sulfur content of the waste gas exiting the sulfur treatment system shall be tested weekly for sulfur content and higher heating value. If compliance with the sulfur emission limits has been demonstrated for 8 consecutive weeks, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. Testing shall be by grab sample analysis by GC-FPD/TCD or other District approved methods for H₂S and mercaptans performed in the laboratory and EPA Method 19. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. Daily SO_x emissions from combustion of waste gas shall be calculated based on the waste gas sulfur content as determined by gas detector tube sampling or the most recent laboratory analysis, whichever is greater. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. When source or type of gas changes, sampling for sulfur content shall be conducted within one week. A change in fuel type is defined as changing between any of the following: PUC-Quality gas, unprocessed field gas, or any field gas with any specific level of pretreatment. [District Rule 2520] Federally Enforceable Through Title V Permit
15. At least once every 12 months, unit shall be stack tested to demonstrate compliance with the SO_x emission limit required by this permit (ppmv @3 % O₂) using EPA Method 6C, Method 8 or ARB Method 100. Stack testing for SO_x emissions is not required if unit was fired only on PUC quality natural during the 12 months prior to the compliance testing anniversary date. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
16. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit
17. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520 and 4305] Federally Enforceable Through Title V Permit
18. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
19. Subject to the definitions and requirements of Section 5.3, District Rule 4306, emission factor limitations of this permit shall not apply during periods of startup, shutdown, or refractory curing. Duration of startup and shutdown shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining in the heat exchanger section of the unit, and shall not exceed 30 hours per occurrence. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ 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 and 4306] Federally Enforceable Through Title V Permit
21. 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 and 4306] 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.

22. If either the NO_x or CO concentrations corrected to 3% O₂, 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 and 4306] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (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 and 4306] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months, (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months, (no more than 30 days before or after the required 36 months source test date). 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 4351] Federally Enforceable Through Title V Permit
25. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
26. 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 and 4306] Federally Enforceable Through Title V Permit
27. 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 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
28. 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
29. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D 1072, D 4468, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rules 1081, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
30. NO_x, and CO emissions shall be measured with annual source testing conducted by independent testing laboratory with sample collection by ARB certified testing laboratory and shall be witnessed or authorized by the District. [District Rule 1081, 3.0, 4.0 and Rule 2520] Federally Enforceable Through Title V Permit
31. 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
32. If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520] 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. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the non-certified (non PUC/FERC regulated) natural gas being fired in the steam generator shall be determined using ASTM D 1072, D 4468, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Last Amended December 17, 1992), 4301 (Last Amended December 17, 1992), 4406 (Amended December 17, 1992), and 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily record of all natural gas consumption including waste gas consumption, fuel sulfur content, calculated SO_x emissions, supplier certifications and test results to show compliance with the conditions of this permit. The operator shall record daily amount and type (s) of fuel(s) combusted and all dates on which unit is fired on any non certified fuel and record specific type(s) of non certified fuel used. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
38. 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, and 4306] 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-1121-18-28

EXPIRATION DATE: 12/31/2016

SECTION: 29 TOWNSHIP: 19S RANGE: 15E

EQUIPMENT DESCRIPTION:

S-10, 62.5 MMBTU/HR THERMOTICS, NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW NOX BURNER, AND A FLUE GAS RECIRCULATION (FGR) SYSTEM SERVED BY LO-COST H2S SCAVENGER SYSTEM AND SULFATREAT VESSELS SHARED WITH PERMIT UNITS C-1121-17, '-19 AND '-41

PERMIT UNIT REQUIREMENTS

1. Fuel consumption for the steam generator shall not exceed 1,500 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Combined quantity of well vent and tank vapor recovery gases combusted within steam generators -17, -18, -19, and -41, from the four CVR systems (C-1121-38, -39, -114, & -116) and the section 32 TVR system shall not exceed 1,300,000 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas, vapor recovery gas, or a combination of natural gas and vapor recovery gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. Lo-Cost H2S scavenging system shall be used whenever vapor recovery gas is fired in this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following limits: NOx (as NO2): 14 ppmv @ 3% O2 or 0.017 lb/MMBtu (25.5 lb/day), CO: 43 ppmv @ 3%O2 or 0.032 lb/MMBtu (48.0 lb/day), PM10: 0.0076 lb/MMBtu (11.4 lb-PM10/day), or VOC: 0.008 lb/MMBtu (12.0 lb/day). [District Rules 2201, 4201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. When fired on PUC quality natural gas, the SOx emissions rate shall not exceed 0.00285 lb/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. When fired on gases other than PUC quality natural gas, the SOx emissions rate shall not exceed 9 ppmv @ 3% O2 or 0.015 lb/MMBtu (22.8 lb/day). [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
10. Combined emissions of SOx, calculated as SO2, from the steam generators and the flare (C-1121-17, -18, -19, -41, & -168) shall not exceed 28,580 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The sulfur content of treated waste gas exiting the H2S Scavenger System shall be determined on a daily basis by gas detector tube sampling. [District Rules 2201 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. The sulfur content of the waste gas exiting the sulfur treatment system shall be tested weekly for sulfur content and higher heating value. If compliance with the sulfur emission limits has been demonstrated for 8 consecutive weeks, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. Testing shall be by grab sample analysis by GC-FPD/TCD or other District approved methods for H₂S and mercaptans performed in the laboratory and EPA Method 19. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. Daily SO_x emissions from combustion of waste gas shall be calculated based on the waste gas sulfur content as determined by gas detector tube sampling or the most recent laboratory analysis, whichever is greater. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. When source or type of gas changes, sampling for sulfur content shall be conducted within one week. A change in fuel type is defined as changing between any of the following: PUC-Quality gas, unprocessed field gas, or any field gas with any specific level of pretreatment. [District Rule 2520] Federally Enforceable Through Title V Permit
15. At least once every 12 months, unit shall be stack tested to demonstrate compliance with the SO_x emission limit required by this permit (ppmv @3 % O₂) using EPA Method 6C, Method 8 or ARB Method 100. Stack testing for SO_x emissions is not required if unit was fired only on PUC quality natural during the 12 months prior to the compliance testing anniversary date. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
16. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit
17. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520 and 4305] Federally Enforceable Through Title V Permit
18. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
19. Subject to the definitions and requirements of Section 5.3, District Rule 4306, emission factor limitations of this permit shall not apply during periods of startup, shutdown, or refractory curing. Duration of startup and shutdown shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining in the heat exchanger section of the unit, and shall not exceed 30 hours per occurrence. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ 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 and 4306] Federally Enforceable Through Title V Permit
21. 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 and 4306] 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.

22. If either the NO_x or CO concentrations corrected to 3% O₂, 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 and 4306] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (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 and 4306] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months, (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months, (no more than 30 days before or after the required 36 months source test date). 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 4351] Federally Enforceable Through Title V Permit
25. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
26. 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 and 4306] Federally Enforceable Through Title V Permit
27. 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 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
28. 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
29. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D 1072, D 4468, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rules 1081, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
30. NO_x, and CO emissions shall be measured with annual source testing conducted by independent testing laboratory with sample collection by ARB certified testing laboratory and shall be witnessed or authorized by the District. [District Rule 1081, 3.0, 4.0 and Rule 2520] Federally Enforceable Through Title V Permit
31. 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
32. If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520] 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. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the non-certified (non PUC/FERC regulated) natural gas being fired in the steam generator shall be determined using ASTM D 1072, D 4468, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Last Amended December 17, 1992), 4301 (Last Amended December 17, 1992), 4406 (Amended December 17, 1992), and 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily record of all natural gas consumption including waste gas consumption, fuel sulfur content, calculated SO_x emissions, supplier certifications and test results to show compliance with the conditions of this permit. The operator shall record daily amount and type (s) of fuel(s) combusted and all dates on which unit is fired on any non certified fuel and record specific type(s) of non certified fuel used. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
38. 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, and 4306] 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-1121-19-28

EXPIRATION DATE: 12/31/2016

SECTION: 29 TOWNSHIP: 19S RANGE: 15E

EQUIPMENT DESCRIPTION:

S-11, 62.5 MMBTU/HR THERMOTICS, NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH A COEN QLN-ULN LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM SERVED BY LO-COST H2S SCAVENGER SYSTEM AND SULFATREAT VESSELS SHARED WITH PERMIT UNITS C-1121-17, '-18 AND '-41

PERMIT UNIT REQUIREMENTS

1. Fuel consumption for the steam generator shall not exceed 1,500 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Combined quantity of well vent and tank vapor recovery gases combusted within steam generators '-17, '-18, '-19, and '-41, from the four CVR systems (C-1121-38, -39, -114, & -116) and the section 32 TVR system shall not exceed 1,300,000 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas, vapor recovery gas, or a combination of natural gas and vapor recovery gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. Lo-Cost H2S scavenging system shall be used whenever vapor recovery gas is fired in this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following limits: NOx (as NO2): 14 ppmv @ 3% O2 or 0.017 lb/MMBtu (25.5 lb/day), CO: 43 ppmv @ 3% O2 or 0.032 lb/MMBtu (48.0 lb/day), PM10: 0.0076 lb/MMBtu (11.4 lb-PM10/day), or VOC: 0.008 lb/MMBtu (12.0 lb/day). [District Rules 2201, 4201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. When fired on PUC quality natural gas, the SOx emissions rate shall not exceed 0.00285 lb/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. When fired on gases other than PUC quality natural gas, the SOx emissions rate shall not exceed 9 ppmv @ 3% O2 or 0.015 lb/MMBtu (22.8 lb/day). [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
10. Combined emissions of SOx, calculated as SO2, from the steam generators and the flare (C-1121-17, -18, -19, -41, & -168) shall not exceed 28,580 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The sulfur content of treated waste gas exiting the H2S Scavenger System shall be determined on a daily basis by gas detector tube sampling. [District Rules 2201 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. The sulfur content of the waste gas exiting the sulfur treatment system shall be tested weekly for sulfur content and higher heating value. If compliance with the sulfur emission limits has been demonstrated for 8 consecutive weeks, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. Testing shall be by grab sample analysis by GC-FPD/TCD or other District approved methods for H₂S and mercaptans performed in the laboratory and EPA Method 19. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. Daily SO_x emissions from combustion of waste gas shall be calculated based on the waste gas sulfur content as determined by gas detector tube sampling or the most recent laboratory analysis, whichever is greater. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. When source or type of gas changes, sampling for sulfur content shall be conducted within one week. A change in fuel type is defined as changing between any of the following: PUC-Quality gas, unprocessed field gas, or any field gas with any specific level of pretreatment. [District Rule 2520] Federally Enforceable Through Title V Permit
15. At least once every 12 months, unit shall be stack tested to demonstrate compliance with the SO_x emission limit required by this permit (ppmv @3 % O₂) using EPA Method 6C, Method 8 or ARB Method 100. Stack testing for SO_x emissions is not required if unit was fired only on PUC quality natural during the 12 months prior to the compliance testing anniversary date. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
16. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit
17. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520 and 4305] Federally Enforceable Through Title V Permit
18. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
19. Subject to the definitions and requirements of Section 5.3, District Rule 4306, emission factor limitations of this permit shall not apply during periods of startup, shutdown, or refractory curing. Duration of startup and shutdown shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining in the heat exchanger section of the unit, and shall not exceed 30 hours per occurrence. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ 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 and 4306] Federally Enforceable Through Title V Permit
21. 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 and 4306] 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.

22. If either the NO_x or CO concentrations corrected to 3% O₂, 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 and 4306] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (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 and 4306] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months, (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months, (no more than 30 days before or after the required 36 months source test date). 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 4351] Federally Enforceable Through Title V Permit
25. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
26. 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 and 4306] Federally Enforceable Through Title V Permit
27. 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 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
28. 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
29. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D 1072, D 4468, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rules 1081, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
30. NO_x, and CO emissions shall be measured with annual source testing conducted by independent testing laboratory with sample collection by ARB certified testing laboratory and shall be witnessed or authorized by the District. [District Rule 1081 and Rule 2520] Federally Enforceable Through Title V Permit
31. 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
32. If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520] 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. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the non-certified (non PUC/FERC regulated) natural gas being fired in the steam generator shall be determined using ASTM D 1072, D 4468, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Last Amended December 17, 1992), 4301 (Last Amended December 17, 1992), 4406 (Amended December 17, 1992), and 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily record of all natural gas consumption including waste gas consumption, fuel sulfur content, calculated SO_x emissions, supplier certifications and test results to show compliance with the conditions of this permit. The operator shall record daily amount and type (s) of fuel(s) combusted and all dates on which unit is fired on any non certified fuel and record specific type(s) of non certified fuel used. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
38. 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, and 4306] 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-1121-41-28

EXPIRATION DATE: 12/31/2016

SECTION: 29 TOWNSHIP: 19S RANGE: 15E

EQUIPMENT DESCRIPTION:

S-12, 62.5 MMBTU/HR THERMOTICS, NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR (S-12) WITH COEN QLN-ULN BURNER, FLUE GAS RECIRCULATION SERVED BY LO-COST H2S SCAVENGER SYSTEM AND SULFATREAT VESSELS SHARED WITH PERMIT UNITS C- 1121-17, '-18 AND '-19

PERMIT UNIT REQUIREMENTS

1. Fuel consumption for the steam generator shall not exceed 1,500 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Combined quantity of well vent and tank vapor recovery gases combusted within steam generators '-17, '-18, '-19, and '-41, from the four CVR systems (C-1121-38, -39, -114, & -116) and the section 32 TVR system shall not exceed 1,300,000 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only natural gas, vapor recovery gas, or a combination of natural gas and vapor recovery gas shall be used as fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. Lo-Cost H2S scavenging system shall be used whenever vapor recovery gas is fired in this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following limits: NOx (as NO2): 14 ppmv @ 3% O2 or 0.017 lb/MMBtu (25.5 lb/day), CO: 43 ppmv @ 3%O2 or 0.032 lb/MMBtu (48.0 lb/day), PM10: 0.0076 lb/MMBtu (11.4 lb-PM10/day), or VOC: 0.008 lb/MMBtu (12.0 lb/day). [District Rules 2201, 4201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
8. When fired on PUC quality natural gas, the SOx emissions rate shall not exceed 0.00285 lb/MMBtu. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. When fired on gases other than PUC quality natural gas, the SOx emissions rate shall not exceed 9 ppmv @ 3% O2 or 0.015 lb/MMBtu (22.8 lb/day). [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
10. Combined emissions of SOx, calculated as SO2, from the steam generators and the flare (C-1121-17, -18, -19, -41, & -168) shall not exceed 28,580 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The sulfur content of treated waste gas exiting the H2S Scavenger System shall be determined on a daily basis by gas detector tube sampling. [District Rules 2201 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. The sulfur content of the waste gas exiting the sulfur treatment system shall be tested weekly for sulfur content and higher heating value. If compliance with the sulfur emission limits has been demonstrated for 8 consecutive weeks, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. Testing shall be by grab sample analysis by GC-FPD/TCD or other District approved methods for H₂S and mercaptans performed in the laboratory and EPA Method 19. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
13. Daily SO_x emissions from combustion of waste gas shall be calculated based on the waste gas sulfur content as determined by gas detector tube sampling or the most recent laboratory analysis, whichever is greater. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
14. When source or type of gas changes, sampling for sulfur content shall be conducted within one week. A change in fuel type is defined as changing between any of the following: PUC-Quality gas, unprocessed field gas, or any field gas with any specific level of pretreatment. [District Rule 2520] Federally Enforceable Through Title V Permit
15. At least once every 12 months, unit shall be stack tested to demonstrate compliance with the SO_x emission limit required by this permit (ppmv @3 % O₂) using EPA Method 6C, Method 8 or ARB Method 100. Stack testing for SO_x emissions is not required if unit was fired only on PUC quality natural during the 12 months prior to the compliance testing anniversary date. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
16. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit
17. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520 and 4305] Federally Enforceable Through Title V Permit
18. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
19. Subject to the definitions and requirements of Section 5.3, District Rule 4306, emission factor limitations of this permit shall not apply during periods of startup, shutdown, or refractory curing. Duration of startup and shutdown shall not exceed 2 hours each per occurrence. Refractory curing period is defined as a maintenance-based reduced-load period of time during which a unit is brought from a shutdown status to staged rates of firing for the sole purpose of curing new refractory lining in the heat exchanger section of the unit, and shall not exceed 30 hours per occurrence. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ 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 and 4306] Federally Enforceable Through Title V Permit
21. 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 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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22. If either the NO_x or CO concentrations corrected to 3% O₂, 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 and 4306] Federally Enforceable Through Title V Permit
23. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (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 and 4306] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months, (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months, (no more than 30 days before or after the required 36 months source test date). 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 4351] Federally Enforceable Through Title V Permit
25. The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
26. 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 and 4306] Federally Enforceable Through Title V Permit
27. 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 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
28. 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
29. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, NO_x (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D 1072, D 4468, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rules 1081, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
30. NO_x, and CO emissions shall be measured with annual source testing conducted by independent testing laboratory with sample collection by ARB certified testing laboratory and shall be witnessed or authorized by the District. [District Rule 1081 and Rule 2520] Federally Enforceable Through Title V Permit
31. 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
32. If the steam generator is fired on PUC-regulated natural gas, then the permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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33. If the steam generator is not fired on PUC-regulated natural gas, then the sulfur content of the non-certified (non PUC/FERC regulated) natural gas being fired in the steam generator shall be determined using ASTM D 1072, D 4468, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rule 2520] Federally Enforceable Through Title V Permit
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the requirements of County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera), 402 (Madera), 404 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 405 (Madera), 408 (Fresno, Kern, Tulare, Kings, Stanislaus, Merced, and San Joaquin), 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin), and 408.2 (Merced). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rules 4201 (Last Amended December 17, 1992), 4301 (Last Amended December 17, 1992), 4406 (Amended December 17, 1992), and 4801 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
36. This unit commenced construction, modification, or reconstruction prior to June 19, 1984. This unit has not been used to produce electricity for sale in 1985 or on or after November 15, 1990. Therefore, the requirements of 40 CFR 72.6(b) and 40 CFR 60.40c do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
37. Permittee shall maintain daily record of all natural gas consumption including waste gas consumption, fuel sulfur content, calculated SO_x emissions, supplier certifications and test results to show compliance with the conditions of this permit. The operator shall record daily amount and type (s) of fuel(s) combusted and all dates on which unit is fired on any non certified fuel and record specific type(s) of non certified fuel used. [District Rules 1070 and 2520] Federally Enforceable Through Title V Permit
38. 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, and 4306] Federally Enforceable Through Title V Permit

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