



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT



NOV 08 2011

Sy Le  
California Dairies, Inc.  
2000 N. Plaza Drive  
Visalia, CA 93201

**Re: Administrative Amendment to Title V Operating Permit**  
**District Facility # : S-1346**  
**Project # : S-1103786**

Dear Mr. Le:

In accordance with District Rule 2520, Federally Mandated Operating Permits, the District reviewed the California Dairies, Inc. application and has administratively amended the requirements for their Title V operating permit. This administrative amendment incorporates the requirements of ATC S-1346-1-12, '-2-9 and '-3-11, which were issued with Certificate of Conformity after EPA review into the Title V permit for this facility. The change is to designate boiler S-1346-1 as a standby unit for boilers '-2 and '-3. This amended Title V permit is being sent to you as a final action.

Your cooperation in this matter was appreciated. Should you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,



David Warner  
Director of Permit Services

DW:dg

cc: Gerardo Rios, EPA Region IX

Enclosures

**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)**  
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**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: S-1346-1-12

EXPIRATION DATE: 07/31/2013

SECTION: SW17 TOWNSHIP: 22S RANGE: 25E

## EQUIPMENT DESCRIPTION:

21 MMBTU/HR HURST 500 HP NATURAL GAS-FIRED BOILER (S/N S2500-150-4) WITH A COMBUSTION SYSTEMS LOW NOX BURNER MODEL 500-P3 AND FLUE GAS RECIRCULATION (FGR) SYSTEM DESIGNATED AS STANDBY UNIT

## PERMIT UNIT REQUIREMENTS

1. 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>, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
2. The boiler shall only be operated when unit S-1346-2 or '-3 is not in operation. Operating hours for the boiler shall not exceed 720 hours/year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Annual operating fuel consumption for the boiler shall not exceed 15,120 MMBtu. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
4. A non-resettable elapsed time meter or a non-resettable totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
5. Unit shall be fired on PUC-regulated natural gas. [District Rules 2201, 4301, 5.2.1 and County Rules 404 (Madera), 406 (Fresno), and 407 (the six remaining SJVUAPCD counties) and 40 CFR 60.42c(d)] Federally Enforceable Through Title V Permit
6. Operator shall ensure that all required source testing conforms to the compliance testing procedures described in District Rule 1081. [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
7. Operator shall maintain copies of fuel invoices and supplier certifications. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 405 (Madera), Rule 408 (Fresno), Rule 408.2 (Merced) and 407.2 (Kern, Tulare, Kings, Stanislaus, and San Joaquin); Rule 402 (Madera) and 404 (all seven remaining counties in the San Joaquin Valley); SJVUAPCD Rule 4301. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 405 (Madera), 408 and 409 (Kern), and 408 (all six remaining counties in the San Joaquin Valley); Rule 404 (Madera) 406 (Fresno), and 407 (all six remaining counties in the San Joaquin Valley); SJVUAPCD Rule 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 4201 and 4301. A permit shield is granted from these requirements. [District Rule 2520, 13.2] 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.

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 4305, Sec. 4.2, 5.1.1, 5.1.2., 5.4, 6.1.1, 6.2 (excepting 6.2.3), 6.3, 8.1 and Rule 4351 Sec 4.2, 5.2.2.1, 5.2.2.2, 6.1.1, 6.2 (excepting 6.2.3), 8.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. 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) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
14. Flue gas recirculation shall be utilized whenever boiler is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
15. For emissions source testing performed pursuant to Section 6.3.1 of District Rule 4305, (amended August 21, 2003) and District Rule 4306 (amended March 17, 2005), for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30- consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 2520, 9.3.2, 4305 and 4306, 5.5.5] Federally Enforceable Through Title V Permit
16. Emissions rates from this unit shall not exceed any of the following limits: 30 ppmv NOX @ 3% O2 or 0.036 lb-NOX/MMBtu, 0.00285 lb-SOX/MMBtu, 0.003 lb-PM10/MMBtu, 230 ppmv CO @ 3% O2 or 0.17 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
17. NO<sub>x</sub>, and CO emissions shall be measured with annual source testing conducted by independent testing laboratory and shall be witnessed or authorized by the District. [District Rules 2520, 9.3.2 and 4306, 6.3.1] Federally Enforceable Through Title V Permit
18. The source test 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
19. If permittee fails any compliance demonstration for NO<sub>x</sub> or CO emissions limits when testing not less than once every 36 months, compliance with NO<sub>x</sub> and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2 and 4306, 6.3.1] Federally Enforceable Through Title V Permit
20. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NO<sub>x</sub> and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO<sub>x</sub> emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 4306 and 6.3.2] Federally Enforceable Through Title V Permit
21. The following conditions must be met for representative unit(s) to be used to test for NO<sub>x</sub> and CO limits for a group of units: 1) all units are initially source-tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4306, 6.3.2] Federally Enforceable Through Title V Permit
22. All units in a group for which representative units are source for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.3.2 and 4306, 6.3.2] 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.

23. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4306, 6.3.2] Federally Enforceable Through Title V Permit
24. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 2520, 9.3.2, 4306, 6.3.2] Federally Enforceable Through Title V Permit
25. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100 and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081 and 4306, 6.2] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rules 1081, 7.1 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. Source sampling to determine the compliance status of an emissions source shall be witnessed or authorized by District personnel. [District Rules 1081, 7.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081, 7.3 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Operation shall be equipped with flue gas recirculation valve setting indicator. [District NSR Rule and District Rule 4306, 5.4.2] Federally Enforceable Through Title V Permit
30. The flue gas recirculation valve setting shall be monitored at least on a weekly basis. 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 week. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4306, 5.4.2] Federally Enforceable Through Title V Permit
31. The acceptable settings for the flue gas recirculation valve shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be that for which compliance with applicable NOx and CO emissions rates have been demonstrated through source testing at a similar firing rate. [District Rule 4306, 5.4.2] Federally Enforceable Through Title V Permit
32. If the flue gas recirculation valve setting is less than the normal range/level, the permittee shall return the flue gas recirculation valve setting to the normal range/level as soon as possible, but no longer than 1 hour of operation after detection. If the flue gas recirculation valve setting is not returned to the normal range/level within 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour, and conduct a source test within 60 days of the first exceedance, to demonstrate compliance with the applicable emission limits at the new flue gas recirculation valve setting. A District-approved portable analyzer may be used in lieu of a source test to demonstrate compliance. 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 District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4306, 5.4.2] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of the date and time of flue gas recirculation valve settings, the observed setting, and the firing rate at the time of the flue gas recirculation valve setting measurements. The records must also include a description of any corrective action taken to maintain the flue gas recirculation valve setting within the acceptable range. [District Rule 4306, 5.4.2] Federally Enforceable Through Title V Permit
34. Operator shall maintain all records on the premises for at least five years and made available for District inspection upon request. Recordkeeping shall conform to the recordkeeping requirements described in District Rule 2520. [District Rules 2201 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:** S-1346-2-9

**EXPIRATION DATE:** 07/31/2013

**SECTION:** SW17 **TOWNSHIP:** 22S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

21 MMBTU/HR HURST 500 HP NATURAL GAS-FIRED STANDBY BOILER (S/N S2500-150-5) WITH LO-NOX BURNER AND FLUE GAS RECIRCULATION

## PERMIT UNIT REQUIREMENTS

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1. 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>, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
2. This boiler shall not be operated when S-1346-1 and '-3 are both in operation. Operating hours shall not exceed 720 hours/yr. [District Rule 2201 and 4306] Federally Enforceable Through Title V Permit
3. Annual operating fuel consumption for the boiler shall not exceed 15,120 MMBtu. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
4. Unit shall be fired on PUC-regulated natural gas. [District Rule 4320, 5.4.1; District Rule 4301, 5.2.1; County Rules 404 (Madera), 406 (Fresno), and 407 (the six remaining SJVUAPCD counties); and 40 CFR 60.42c(d)] Federally Enforceable Through Title V Permit
5. Operator shall ensure that all required source testing conforms to the compliance testing procedures described in District Rule 1081. [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Nitrogen oxide (NO<sub>x</sub>) emission concentrations in ppmv referenced at dry stack emissions shall be corrected to 3% O<sub>2</sub> and lb/MMBtu rates shall be calculated as lb NO<sub>2</sub>/MMBtu of heat input (hhv). [District Rule 4305, 8.1 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
7. 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) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Flue gas recirculation shall be utilized whenever boiler is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
9. For emissions source testing performed pursuant to Section 6.3.1 of District Rule 4305, (amended August 21, 2003) and District Rule 4306 (amended September 18, 2003), for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30- consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 2520, 9.3.2, 4305 and 4306, 5.5.5] Federally Enforceable Through Title V Permit
10. Emissions from this boiler shall not exceed any of the following limits: PM<sub>10</sub>: 0.003 lb/MMBtu, SO<sub>x</sub> (as SO<sub>2</sub>): 0.00285 lb/MMBtu, NO<sub>x</sub> (as NO<sub>2</sub>): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu or CO: 0.170 lb/MMBtu. [District Rules 2201, 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.

11. NO<sub>x</sub> and CO emissions shall be measured with annual source testing conducted by independent testing laboratory and shall be witnessed or authorized by the District. [District Rules 2520, 9.3.2, 4305, 6.3.1 and 4306] Federally Enforceable Through Title V Permit
12. If permittee fails any compliance demonstration for NO<sub>x</sub> or CO emissions limits when testing not less than once every 36 months, compliance with NO<sub>x</sub> and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2, 4305, 6.3.1 and 4306] Federally Enforceable Through Title V Permit
13. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NO<sub>x</sub> and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO<sub>x</sub> emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rules 4305, 6.3.2 and 4306] Federally Enforceable Through Title V Permit
14. The following conditions must be met for representative unit(s) to be used to test for NO<sub>x</sub> and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
15. All units in a group for which representative units are source for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
16. All units in a group for which representative units are source tested to for NO<sub>x</sub> and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
17. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100 and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 6.2 and 4306] 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 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rules 1081, 7.1 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Source sampling to determine the compliance status of an emissions source shall be witnessed or authorized by District personnel. [District Rules 1081, 7.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081, 7.3 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operation shall be equipped with flue gas recirculation valve setting indicator. [District Rule 2201 and District Rule 4305, 5.4.2 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.

23. The flue gas recirculation valve setting shall be monitored at least on a weekly basis. 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 week. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit
24. The acceptable settings for the flue gas recirculation valve shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be that for which compliance with applicable NOx and CO emissions rates have been demonstrated through source testing at a similar firing rate. [District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit
25. If the flue gas recirculation valve setting is less than the normal range/level, the permittee shall return the flue gas recirculation valve setting to the normal range/level as soon as possible, but no longer than 1 hour of operation after detection. If the flue gas recirculation valve setting is not returned to the normal range/level within 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour, and conduct a source test within 60 days of the first exceedance, to demonstrate compliance with the applicable emission limits at the new flue gas recirculation valve setting. A District-approved portable analyzer may be used in lieu of a source test to demonstrate compliance. 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 District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit
26. The permittee shall maintain records of the date and time of flue gas recirculation valve settings, the observed setting, and the firing rate at the time of the flue gas recirculation valve setting measurements. The records must also include a description of any corrective action taken to maintain the flue gas recirculation valve setting within the acceptable range. [District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit
27. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201, 4305, 4306] Federally Enforceable Through Title V Permit
28. Operator shall maintain copies of fuel invoices and supplier certifications. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such 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 Rule 4320] Federally Enforceable Through Title V Permit
32. On and after January 1, 2014, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 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:** S-1346-3-11

**EXPIRATION DATE:** 07/31/2013

**SECTION:** SW17 **TOWNSHIP:** 22S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

21 MMBTU/HR HURST 500 HP NATURAL GAS-FIRED BOILER (S/N S-2500-150-3) WITH LO-NOX BURNER AND FLUE GAS RECIRCULATION SYSTEM

## PERMIT UNIT REQUIREMENTS

1. 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>, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
2. Annual operating fuel consumption for the boiler shall not exceed 15,120 MMBtu. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
3. This boiler shall not be operated when S-1346-1 and -2 are both in operation. Operating hours shall not exceed 720 hours/yr. [District Rule 2201 and 4306] Federally Enforceable Through Title V Permit
4. Unit shall be fired on PUC-regulated natural gas. [District Rule 4320, 5.4.1; District Rule 4301, 5.2.1; County Rules 404 (Madera), 406 (Fresno), and 407 (the six remaining SJVUAPCD counties); and 40 CFR 60.42c(d)] Federally Enforceable Through Title V Permit
5. Operator shall ensure that all required source testing conforms to the compliance testing procedures described in District Rule 1081. [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
6. Nitrogen oxide (NO<sub>x</sub>) emission concentrations in ppmv referenced at dry stack emissions shall be corrected to 3% O<sub>2</sub> and lb/MMBtu rates shall be calculated as lb NO<sub>2</sub>/MMBtu of heat input (hhv). [District Rule 4305, 8.1 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
7. 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) do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Flue gas recirculation shall be utilized whenever boiler is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
9. For emissions source testing performed pursuant to Section 6.3.1 of District Rule 4305, (amended August 21, 2003) and District Rule 4306 (amended September 18, 2003), for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30- consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 2520, 9.3.2, 4305 and 4306, 5.5.5] Federally Enforceable Through Title V Permit
10. Emissions from this boiler shall not exceed any of the following limits: PM<sub>10</sub>: 0.00285 lb/MMBtu, SO<sub>x</sub> (as SO<sub>2</sub>): 0.003 lb/MMBtu, NO<sub>x</sub> (as NO<sub>2</sub>): 0.036 lb/MMBtu, VOC: 0.003 lb/MMBtu or CO: 0.170 lb/MMBtu. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit

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11. NO<sub>x</sub> and CO emissions shall be measured with annual source testing conducted by independent testing laboratory and shall be witnessed or authorized by the District. [District Rules 2520, 9.3.2, 4305, 6.3.1 and 4306] Federally Enforceable Through Title V Permit
12. If permittee fails any compliance demonstration for NO<sub>x</sub> or CO emissions limits when testing not less than once every 36 months, compliance with NO<sub>x</sub> and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2, 4305, 6.3.1 and 4306] Federally Enforceable Through Title V Permit
13. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NO<sub>x</sub> and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO<sub>x</sub> emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement). [District Rules 4305, 6.3.2 and 4306] Federally Enforceable Through Title V Permit
14. The following conditions must be met for representative unit(s) to be used to test for NO<sub>x</sub> and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
15. All units in a group for which representative units are source for NO<sub>x</sub> and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
16. All units in a group for which representative units are source tested to for NO<sub>x</sub> and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
17. The number of representative units source tested for NO<sub>x</sub> and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100 and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, 6.2 and 4306] 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 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rules 1081, 7.1 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Source sampling to determine the compliance status of an emissions source shall be witnessed or authorized by District personnel. [District Rules 1081, 7.2 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081, 7.3 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operation shall be equipped with flue gas recirculation valve setting indicator. [District Rule 2201 and District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit

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23. The flue gas recirculation valve setting shall be monitored at least on a weekly basis. 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 week. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit
24. The acceptable settings for the flue gas recirculation valve shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be that for which compliance with applicable NOx and CO emissions rates have been demonstrated through source testing at a similar firing rate. [District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit
25. If the flue gas recirculation valve setting is less than the normal range/level, the permittee shall return the flue gas recirculation valve setting to the normal range/level as soon as possible, but no longer than 1 hour of operation after detection. If the flue gas recirculation valve setting is not returned to the normal range/level within 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour, and conduct a source test within 60 days of the first exceedance, to demonstrate compliance with the applicable emission limits at the new flue gas recirculation valve setting. A District-approved portable analyzer may be used in lieu of a source test to demonstrate compliance. 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 District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit
26. The permittee shall maintain records of the date and time of flue gas recirculation valve settings, the observed setting, and the firing rate at the time of the flue gas recirculation valve setting measurements. The records must also include a description of any corrective action taken to maintain the flue gas recirculation valve setting within the acceptable range. [District Rule 4305, 5.4.2 and 4306] Federally Enforceable Through Title V Permit
27. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201, 4305, 4306] Federally Enforceable Through Title V Permit
28. Operator shall maintain copies of fuel invoices and supplier certifications. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
31. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such 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 Rule 4320] Federally Enforceable Through Title V Permit
32. On and after January 1, 2014, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320] Federally Enforceable Through Title V Permit

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