

10. Flue gas ducting from engine to HRSG shall have no provisions for introduction of dilution air. [District Rule 1110] Federally Enforceable Through Title V Permit
11. Lube oil cooler/accumulation vent shall be equipped with control device(s) approved by the APCO sufficient to prevent emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Lube oil cooler/accumulator vent(s) shall not have detectable emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Natural gas sulfur content shall not exceed 0.31 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Facility shall operate as a cogeneration facility pursuant to Public Resources Code section 25134 for TEOR operations unless prior District and CEC approval is granted to operate otherwise. [District Rule 2080] Federally Enforceable Through Title V Permit
15. All CEM's shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
16. Quarterly CEM reports shall be submitted to the APCO according to EPA regulations as specified in 40 CFR 60 Appendix B. [District Rule 4001 and District rule 1080, 8.0] Federally Enforceable Through Title V Permit
17. Audits of all monitors shall be conducted by independent laboratory in accordance with EPA guidelines and witnessed by District. Reports shall be submitted to District within 30 days of audits. [District Rule 1080] Federally Enforceable Through Title V Permit
18. All notification, recordkeeping, performance tests, reporting requirements, and compliance testing requirements of Rule 4001 NSPS shall be satisfied. [District Rule 4001] Federally Enforceable Through Title V Permit
Operational records including fuel type, fuel characteristics, and consumption shall be maintained and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
20. Accurate records of NO_x (as NO₂) and CO flue gas concentration corrected to 15% O₂ and fuel gas sulfur content shall be maintained and shall be reported as described in Rule 1080 upon request. [District Rule 1080] Federally Enforceable Through Title V Permit
21. Emission rates shall not exceed the following: PM₁₀: 0.010 lb/MMBtu, SO_x (as SO₂): 0.001 lb/MMBtu, NO_x (as NO₂): 0.018 lb/MMBtu, VOC: 0.009 lb/MMBtu, CO: 0.057 lb/MMBtu, and ammonia - 10 ppmvd @ 15%O₂. [District NSR Rule; District Rule 4201; and Kern County Rule 404] Federally Enforceable Through Title V Permit
22. Permittee shall comply with the following emission limit at all times except during periods of thermal stabilization or reduced load as defined in Rule 4703: NO_x (as NO₂): 5.0 ppmv, and CO: 25 ppmv, dry @ 15% O₂ corrected to ISO conditions. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rule 4703, 5.1.1] Federally Enforceable Through Title V Permit
23. Compliance with NO_x, CO and ammonia emission limits shall be demonstrated by District-witnessed sample collection by independent testing laboratory within 60 days of initial start-up and on an annual basis thereafter. [District Rule 4703 and District Rule 1081] Federally Enforceable Through Title V Permit
24. 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 Rule 1081] Federally Enforceable Through Title V Permit
25. The following test methods shall be used PM₁₀: EPA method 5 (front half and back half), NO_x: EPA Method 7E or 20, CO: EPA method 10 (or 10B) or CARB Method 100, O₂: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rule 1081, 40 CFR 60.335 (b), and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1135-224-22

EXPIRATION DATE: 05/31/2007

SECTION: 17 TOWNSHIP: 31S RANGE: 22E

EQUIPMENT DESCRIPTION:

75 MW COGENERATION UNIT A WITH GE MODEL G7111E FRAME 7E GAS TURBINE ENGINE WITH DRY LOW NOX COMBUSTORS AND SELECTIVE CATALYTIC REDUCTION (SCR) AND UNFIRED HEAT RECOVERY STEAM GENERATOR (HRSG)

PERMIT UNIT REQUIREMENTS

1. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NO_x, CO, and O₂. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
2. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NO_x concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst and oxidation catalyst if required to meet NO_x and CO emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Gas turbine engine shall be equipped with fuel consumption monitor recorder accurate to +/- 3%. [District Rule 2201] Federally Enforceable Through Title V Permit
8. CEM for NO_x (as NO₂) and CO shall conform to Rule 1080 specifications. [District Rules 1080 and 4703] Federally Enforceable Through Title V Permit
9. HRSG exhaust stack shall be equipped with permanent stack sampling provisions adequate to facilitate testing consistent with EPA test methods. [District Rule 2201] Federally Enforceable Through Title V Permit