



APR 29 2014

Scott Frauenheim
California State Prison - Avenal
#1 Kings Way
Avenal, CA 93204

**Re: Notice of Final Action - Minor Title V Permit Modification
District Facility # C-195
Project # C-1120567**

Dear Mr. Frauenheim:

The Air Pollution Control Officer has modified the Title V permit for California State Prison - Avenal by incorporating Authorities to Construct C-195-1-8 and '-3-8. Avenal Prison complied with District Rule 4703 Tier 3 NOx emission requirements by installing a Selective Catalytic Reduction (SCR) system with ammonia injection on their turbines.

Enclosed is the modified Title V permit. The application and proposal were sent to US EPA Region IX on February 5, 2014. 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. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:jj

Enclosures

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

Seyed Sadredin
Executive Director/Air Pollution Control Officer

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-195-1-9

EXPIRATION DATE: 10/31/2016

EQUIPMENT DESCRIPTION:

2,600 KW SOLAR CENTAUR MODEL GSC-4500 GAS TURBINE, AVENAL #1, SN DCG0211, WITH UNFIRED ENERGY RECOVERY INC. MODEL 52.5-1816 THERMAL RECOVERY UNIT, AND CUSTOM BUILT RF MACDONALD SELECTIVE CATALYTIC (SCR) SYSTEM WITH AMMONIA INJECTION, SN W2272

PERMIT UNIT REQUIREMENTS

1. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101] Federally Enforceable Through Title V Permit
2. This turbine shall not operate for more than 8,050 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This turbine shall not operate when the 21 MMBtu/hr backup boiler (C-195-2) and the other turbine (C-195-3) are both operating except for cold starts of less than 1 hour, a shutdown of less than 2 hours, and boiler testing totaling less than 24 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This turbine shall only be fired on PUC-regulated natural gas with a maximum sulfur content of 0.12% by weight as a backup fuel. [40 CFR 60.333, District NSR Rule, District Rule 4201, and District Rule 4801] Federally Enforceable Through Title V Permit
5. Natural gas fuel consumption for the turbine shall not exceed 879,960 scf per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The combined total operating hours of two turbines (C-195-1 and C-195-3) when operating concurrently with two 25.1 MMBtu/hr boilers (C-195-12 and C-195-13) shall not exceed 2,601 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Daily hours of concurrent operation with the two 25.1 boilers (C-195-12 and C-195-13) shall be maintained. [District Rule 2520] Federally Enforceable Through Title V Permit
8. The exhaust NO_x concentrations shall not exceed 9 ppmvd @15% O₂ or 1.1 lb/hr, averaged over a 3-hour period, except during the thermal stabilizing period or reduced load period, as defined in District Rule 4703. [40 CFR 60.332(c), District Rule 2201 and District Rule 4703] Federally Enforceable Through Title V Permit
9. The exhaust CO concentration shall not exceed 130.0 ppmvd @ 15% O₂ or 10.00 lb/hr, averaged over a 3-hour period, except during the thermal stabilizing period or reduced load period, as defined in District Rule 4703. [District Rule 2201 and District Rule 4703] Federally Enforceable Through Title V Permit
10. Ammonia (NH₃) emissions shall not exceed either of the following limits: 1.28 lb/hr or 10 ppmvd @ 15% O₂ (based on a 1-hour rolling average). [District Rule 2201] Federally Enforceable Through Title V Permit
11. Daily emissions shall not exceed any of the following: 122.6 lb-SO_x/day, 36.0 lb-PM₁₀/day, or 120.0 lb-VOC(NMHC)/day. [District Rule 221 and 4301] 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. Permittee shall perform a source test to measure NOx and CO emissions (ppmvd @ 15% O2 and lb/hr) at least once every twelve months. [District Rules 1081 and 4703, 6.3.1] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. The following test methods shall be used: NOx - EPA Method 7E or 20, CO - EPA Method 10 or 10B, O2 - EPA Method 3, 3A, or 20, and ammonia - BAAQMD Method ST-1B. NOx test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 40 CFR 60.335, and 4703, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit
16. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit
17. Ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
18. During initial performance testing, the ammonia injection rate shall be monitored concurrently with each testing run to establish acceptable values and ranges that provide a reasonable assurance of ongoing compliance with the emission limitations stated in this permit. The minimum ammonia injection rates demonstrated during the initial performance test to result in compliance with the NOx emission limits shall be imposed as a condition in the Permit to Operate. [40 CFR 60.334(f)(3)] Federally Enforceable Through Title V Permit
19. If the ammonia injection rate is less than the minimum ammonia injection rate demonstrated during the initial compliance test, the permittee shall return the ammonia injection rate above the minimum ammonia injection rate established during compliance testing as soon as possible, but no longer than 8 hours after detection. If the ammonia injection rate is not returned above the minimum ammonia injection rate established during compliance testing within 8 hours, 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 reduced ammonia injection rate. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 weekly. If compliance with NOx and CO emission is demonstrated for eight (8) consecutive weeks, then the monitoring frequency shall be reduced to monthly. If deviations are observed in two consecutive months, monitoring shall revert to weekly until 8 consecutive weeks show no deviations. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within one (1) day of restarting the unit unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the week if on a weekly monitoring schedule. [District Rules 2201 and 4703 and 40 CFR 60.334] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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21. If the NOx and/or CO concentrations, as measured by the permittee with a portable analyzer, exceed the permitted emission limits, the permittee shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emission limits after eight (8) hour, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
22. This unit shall be fired exclusively on PUC-regulated natural gas and the PUC-regulated natural gas shall have a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.333(b) and District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
23. The sulfur fuel content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If the sulfur fuel content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the monitoring frequency shall be every 6 months. If any six-month monitoring tests result in a sulfur fuel content exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
24. Compliance with the ammonia emission limit shall be demonstrated at least once per month, concurrently with the NOx stack concentration readings, utilizing one of the following procedures: 1) The permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. 2) The permittee may utilize a District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. The permittee shall submit a detailed calculation protocol or monitoring plan for District Approval at least 60 days prior to the commencement of operation. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
25. The facility shall maintain a daily record of the ammonia injection rate and SCR catalyst inlet temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods or thermal stabilizing periods, total hours of operation, and the amount and type of fuel consumed. [District Rule 4703] Federally Enforceable Through Title V Permit
27. Source testing to determine compliance with the NOx, CO and NH3 emission rates (ppmvd @ 15% O2) shall be conducted within 60 days of initial startup under this permit and at least once every 12 months thereafter. [40 CFR 60.335(a) and District Rules 2201 and 4703] 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. All NOx, CO, and O2 emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NOx, CO and O2 analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer 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 readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
30. Permittee shall record fuel consumption, fuel type, and sulfur content of fuel. Records shall be retained for at least five years and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] 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.

31. The owner or operator shall maintain the gas quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 10 grains/100 scf or less. [District Rule 2520, 9.3.2, District Rule 4301, and 40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
32. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate, not to exceed one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
33. Thermal Stabilization Period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
34. The duration of each startup or shutdown event shall not exceed two hours. Start-up and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
35. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
36. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
37. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
38. Particulate matter emissions shall not exceed 0.1 grains/scf at 12% CO₂. [District Rule 4301] Federally Enforceable Through Title V Permit
39. The owner or operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
40. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 2201] 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-195-3-9

EXPIRATION DATE: 10/31/2016

EQUIPMENT DESCRIPTION:

2,600 KW SOLAR CENTAUR MODEL CSC-4500 GAS TURBINE, AVENAL #2, SN DCG02010, WITH UNFIRED ENERGY RECOVERY INC. MODEL 52.5-1416 THERMAL RECOVERY UNIT, AND CUSTOM BUILT RF MACDONALD SELECTIVE CATALYTIC (SCR) SYSTEM WITH AMMONIA INJECTION, SN W2274

PERMIT UNIT REQUIREMENTS

1. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101] Federally Enforceable Through Title V Permit
2. This turbine shall not operate for more than 8,050 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This turbine shall not operate when the 21 MMBtu/hr backup boiler (C-195-2) and the other turbine (C-195-3) are both operating except for cold starts of less than 1 hour, a shutdown of less than 2 hours, and boiler testing totaling less than 24 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This turbine shall only be fired on PUC-regulated natural gas with a maximum sulfur content of 0.12% by weight as a backup fuel. [40 CFR 60.333, District NSR Rule, District Rule 4201, and District Rule 4801] Federally Enforceable Through Title V Permit
5. Natural gas fuel consumption for the turbine shall not exceed 879,960 scf per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The combined total operating hours of two turbines (C-195-1 and C-195-3) when operating concurrently with two 25.1 MMBtu/hr boilers (C-195-12 and C-195-13) shall not exceed 2,601 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Daily hours of concurrent operation with the two 25.1 boilers (C-195-12 and C-195-13) shall be maintained. [District Rule 2520] Federally Enforceable Through Title V Permit
8. The exhaust NOx concentrations shall not exceed 9 ppmvd @15% O2 or 1.1 lb/hr, averaged over a 3-hour period, except during the thermal stabilizing period or reduced load period, as defined in District Rule 4703. [40 CFR 60.332(c), District Rule 2201 and District Rule 4703] Federally Enforceable Through Title V Permit
9. The exhaust CO concentration shall not exceed 130.0 ppmvd @ 15% O2 or 10.00 lb/hr, averaged over a 3-hour period, except during the thermal stabilizing period or reduced load period, as defined in District Rule 4703. [District Rule 2201 and District Rule 4703] Federally Enforceable Through Title V Permit
10. Ammonia (NH3) emissions shall not exceed either of the following limits: 1.28 lb/hr or 10 ppmvd @ 15% O2 (based on a 1-hour rolling average). [District Rule 2201] Federally Enforceable Through Title V Permit
11. Daily emissions shall not exceed any of the following: 122.6 lb-SOx/day, 36.0 lb-PM10/day, or 120.0 lb-VOC(NMHC)/day. [District Rule 2201 and 4301] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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12. Permittee shall perform a source test to measure NOx and CO emissions (ppmvd @ 15% O2 and lb/hr) at least once every twelve months. [District Rules 1081 and 4703, 6.3.1] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. The following test methods shall be used: NOx - EPA Method 7E or 20, CO - EPA Method 10 or 10B, O2 - EPA Method 3, 3A, or 20, and ammonia - BAAQMD Method ST-1B. NOx test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 40 CFR 60.335, and 4703, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit
16. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit
17. Ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
18. During initial performance testing, the ammonia injection rate shall be monitored concurrently with each testing run to establish acceptable values and ranges that provide a reasonable assurance of ongoing compliance with the emission limitations stated in this permit. The minimum ammonia injection rates demonstrated during the initial performance test to result in compliance with the NOx emission limits shall be imposed as a condition in the Permit to Operate. [40 CFR 60.334(f)(3)] Federally Enforceable Through Title V Permit
19. If the ammonia injection rate is less than the minimum ammonia injection rate demonstrated during the initial compliance test, the permittee shall return the ammonia injection rate above the minimum ammonia injection rate established during compliance testing as soon as possible, but no longer than 8 hours after detection. If the ammonia injection rate is not returned above the minimum ammonia injection rate established during compliance testing within 8 hours, 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 reduced ammonia injection rate. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
20. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 weekly. If compliance with NOx and CO emission is demonstrated for eight (8) consecutive weeks, then the monitoring frequency shall be reduced to monthly. If deviations are observed in two consecutive months, monitoring shall revert to weekly until 8 consecutive weeks show no deviations. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within one (1) day of restarting the unit unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the week if on a weekly monitoring schedule. [District Rules 2201 and 4703 and 40 CFR 60.334] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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21. If the NO_x and/or CO concentrations, as measured by the permittee with a portable analyzer, exceed the permitted emission limits, the permittee shall notify the District and return the NO_x and CO concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emission limits after eight (8) hour, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
22. This unit shall be fired exclusively on PUC-regulated natural gas and the PUC-regulated natural gas shall have a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.333(b) and District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
23. The sulfur fuel content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If the sulfur fuel content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the monitoring frequency shall be every 6 months. If any six-month monitoring tests result in a sulfur fuel content exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
24. Compliance with the ammonia emission limit shall be demonstrated at least once per month, concurrently with the NO_x stack concentration readings, utilizing one of the following procedures: 1) The permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. 2) The permittee may utilize a District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. The permittee shall submit a detailed calculation protocol or monitoring plan for District Approval at least 60 days prior to the commencement of operation. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
25. The facility shall maintain a daily record of the ammonia injection rate and SCR catalyst inlet temperature. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods or thermal stabilizing periods, total hours of operation, and the amount and type of fuel consumed. [District Rule 4703] Federally Enforceable Through Title V Permit
27. Source testing to determine compliance with the NO_x, CO and NH₃ emission rates (ppmvd @ 15% O₂) shall be conducted within 60 days of initial startup under this permit and at least once every 12 months thereafter. [40 CFR 60.335(a) and District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
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29. All NO_x, CO, and O₂ emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer 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 readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
30. Permittee shall record fuel consumption, fuel type, and sulfur content of fuel. Records shall be retained for at least five years and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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31. The owner or operator shall maintain the gas quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 10 grains/100 scf or less. [District Rule 2520, 9.3.2, District Rule 4301, and 40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit
32. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate, not to exceed one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
33. Thermal Stabilization Period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
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36. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
37. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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