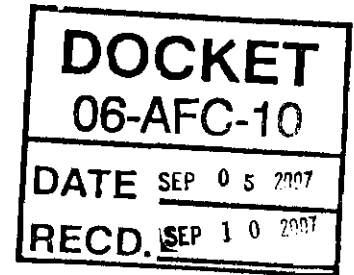




**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT



SEP 05 2007

Che McFarlin  
Siting Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

**Re: Issuance of Revised Final Determination of Compliance (RFDOC)  
Project Number: C1063535 – Starwood Power-Midway, LLC (06-AFC-10)**

Dear Mr. McFarlin:

The District has issued a Revised Final Determination of Compliance (RFDOC) to Starwood Power-Midway, LLC, for the installation of a nominal 120 MW simple cycle, peaking power plant, located at 43699 W. Panoche Road in Firebaugh, CA.

The changes made to the FDOC were in direct response to a comment received from the Environmental Protection Agency (EPA). Current condition #5 requires Starwood Power-Midway, LLC to submit an application to comply with District Rule 2540 – Acid Rain Program within 12 months after commencing operation. EPA indicated that Starwood Power-Midway, LLC is required to comply with the requirements of District Rule 2540 in accordance with the compliance schedule specified in 40 CFR Part 72 and not within 12 months after commencing operation. Therefore, the term "within 12 months after commencing operation" has been removed from this condition.

The District considers the change made to be minor and it did not modify the permitted emission levels or trigger additional public notification requirements. Therefore, this letter serves as our notification of final action and enclosed is your copy of the RFDOC conditions.

**Sayed 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)**

1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061  
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**Southern Region**

2700 M Street, Suite 275  
Bakersfield, CA 93301-2373  
Tel: (661) 326-6900 FAX: (661) 326-6985

Mr. Che McFarlin  
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Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Arnaud Marjollet of the Permit Services Division at (559) 230-5900.

Sincerely,

  
David Warner  
Director of Permit Services

DW: ddb

Enclosures

**EQUIPMENT DESCRIPTION, UNIT C-7286-1-0:**

**30 MW NOMINALLY RATED SIMPLE-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A 311 MMBTU/HR PRATT & WHITNEY MODEL FT8-3 SWIFTPAC NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, WATER INJECTION, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND A OXIDATION CATALYST POWERING A 60 MW NOMINALLY RATED ELECTRICAL GENERATOR (SHARED WITH C-7286-2)**

1. Prior to initial operation of C-7286-1-0, C-7286-2-0, C-7286-3-0 or C-7286-4-0, permittee shall provide NO<sub>x</sub> (as NO<sub>2</sub>) emission reduction credits for the following quantities of emissions: 1st quarter – 8,968 lb; 2nd quarter – 8,968 lb; 3rd quarter – 15,692 lb; and 4th quarter - 11,208 lb. Offsets shall be provided at the appropriate distance ratio specified in Rule 2201. [District Rule 2201]
2. Prior to initial operation of C-7286-1-0, C-7286-2-0, C-7286-3-0 or C-7286-4-0, permittee shall provide PM<sub>10</sub> emission reduction credits for the following quantities of emissions: 1st quarter – 2,102 lb; 2nd quarter – 2,103 lb; 3rd quarter – 3,679 lb; and 4th quarter – 2,628 lb. Offsets shall be provided at the appropriate distance ratio specified in Rule 2201. SO<sub>x</sub> ERC's may be used to offset PM<sub>10</sub> increases at an interpollutant ratio of 1.867 lb-SO<sub>x</sub> : 1.0 lb-PM<sub>10</sub>. [District Rule 2201]
3. ERC certificate numbers (or any splits from these certificates) S-2382-2 and S-2492-5 shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this determination of compliance (DOC) shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of the DOC. [District Rule 2201]
4. Permittee shall submit an application to comply with SJVUAPCD District Rule 2520 - Federally Mandated Operating Permits within 12 months after commencing operation. [District Rule 2520]
5. Permittee shall submit an application to comply with SJVUAPCD District Rule 2540 - Acid Rain Program. [District Rule 2540]
6. District facilities C-3811 and C-7286 are the same stationary source for District permitting purposes. [District Rule 2201]
7. The owner/operator of the Starwood Power-Midway, LLC (Starwood Power) shall minimize the emissions from the gas turbine to the maximum extent possible during the commissioning period. Conditions #7 through #19 shall apply only during the commissioning period as defined below. Unless otherwise indicated, Conditions #20 through #81 shall apply after the commissioning period has ended. [District Rule 2201]
8. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning, and calibration activities recommended by the equipment manufacturers and the Starwood Power construction contractor to insure safe and reliable steady state operation of the gas turbines and associated electrical delivery systems. [District Rule 2201]

9. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when a gas turbine is first fired, whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing and is available for commercial operation. [District Rule 2201]
10. No more than one SwiftPac unit (two paired turbines operating under units C-7286-1 and C-7286-2 or C-7286-3 and C-7286-4) shall be operated at any one time during the commissioning period. [District Rule 2201]
11. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201]
12. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and the oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from this unit. [District Rule 2201]
13. Coincident with the steady-state operation of the SCR system and the oxidation catalyst, NO<sub>x</sub>, CO and VOC emissions from this unit shall comply with the limits specified in condition #29. [District Rule 2201]
14. The permittee shall submit a plan to the District at least four weeks prior to the first firing of this unit, describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the combustors, the installation and operation of the SCR systems and the oxidation catalyst, the installation, calibration, and testing of the NO<sub>x</sub> and CO continuous emissions monitors, and any activities requiring the firing of this unit without abatement by the SCR system or oxidation catalyst. [District Rule 2201]
15. Emission rates from this CTG, during the commissioning period, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 41.65 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr. [District Rule 2201]
16. During the commissioning period, the permittee shall demonstrate compliance with the NO<sub>x</sub> and CO limits specified in condition #15 through the use of properly operated and maintained continuous emissions monitors and recorders as specified in conditions #53 and 54. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). [District Rule 2201]
17. The continuous monitors specified in this permit shall be installed, calibrated, and operational prior to the first firing of this unit. After first firing, the detection range of the CEMS shall be adjusted as necessary to accurately measure the resulting range of NO<sub>x</sub> and CO emission concentrations. [District Rule 2201]

18. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 100 hours during the commissioning period. Such operation of this unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and the oxidation catalyst in place. Upon completion of these activities, the permittee shall provide written notice to the District and the unused balance of the 100 firing hours without abatement shall expire. [District Rule 2201]
19. The total mass emissions of NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, and SO<sub>x</sub> that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limits specified in condition #40. [District Rule 2201]
20. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine. Exhaust ducting may be equipped (if required) with a fresh air inlet blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. The permittee shall submit SCR and oxidation catalyst design details to the District at least 30 days prior to commencement of construction. [District Rule 2201]
21. Permittee shall submit continuous emission monitor design, installation, and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201]
22. The permittee shall submit to the District information correlating the NO<sub>x</sub> control system operating parameters to the associated measured NO<sub>x</sub> output. The information must be sufficient to allow the District to determine compliance with the NO<sub>x</sub> emission limits of this permit when no continuous emission monitoring data for NO<sub>x</sub> is available or when continuous emission monitoring system is not operating properly. [District Rule 4703]
23. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
24. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
25. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
26. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
27. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for up to three minutes in any hour. [District Rules 2201 and 4101]

28. This CTG shall be fired exclusively on PUC-regulated natural gas with a sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and 40 CFR 60.4330(a)(2)]
29. Emission rates from this CTG, except during startup and shutdown periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 2.8 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; CO – 4.19 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; VOC (as methane) – 0.82 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr. NO<sub>x</sub> (as NO<sub>2</sub>) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]
30. Combined emission rates from the CTG's operating under permit units C-7286-1 and C-7286-2, except during startup and shutdown periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 5.6 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; CO – 8.38 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; VOC (as methane) – 1.64 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>; PM<sub>10</sub> – 3.70 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 1.78 lb/hr. NO<sub>x</sub> (as NO<sub>2</sub>) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]
31. The ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 4.24 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> over a 24 hour rolling average. [District Rules 2201 and 4102]
32. During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 4.17 lb/hr; CO – 12.5 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr, based on a one hour average. [District Rules 2201 and 4703]
33. During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 1.50 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr, based on a one hour average. [District Rules 2201 and 4703]
34. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its SCR operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703]
35. The duration of each startup or shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703]
36. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703]
37. Daily emissions from the CTG shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 67.3 lb/day; CO – 126.0 lb/day; VOC – 19.7 lb/day; PM<sub>10</sub> – 44.4 lb/day; or SO<sub>x</sub> (as SO<sub>2</sub>) – 21.4 lb/day. [District Rule 2201]

38. Combined daily emissions from the CTG's operating under permit units C-7286-1 and C-7286-2 shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 134.6 lb/day; CO – 252.0 lb/day; VOC – 39.4 lb/day; PM<sub>10</sub> – 88.8 lb/day; or SO<sub>x</sub> (as SO<sub>2</sub>) – 42.8 lb/day. [District Rule 2201]
39. Quarterly hours of operation of this CTG shall not exceed any of the following limits: 1<sup>st</sup> Quarter - 800 hours, 2<sup>nd</sup> Quarter - 800 hours, 3<sup>rd</sup> Quarter - 1,400 hours, or 4<sup>th</sup> Quarter - 1,000 hours. [District Rule 2201]
40. Annual emissions from this CTG, calculated on a twelve month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 11,209 lb/year; CO – 19,546 lb/year; VOC – 3,320 lb/year; PM<sub>10</sub> – 7,400 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 3,560 lb/year. [District Rule 2201]
41. Combined annual emissions from the CTG's operating under permit units C-7286-1 and C-7286-2, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 22,416 lb/year; CO – 39,096 lb/year; VOC – 6,400 lb/year; PM<sub>10</sub> – 14,800 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 7,120 lb/year. [District Rule 2201]
42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. [District Rule 2201]
43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
44. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O<sub>2</sub>) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O<sub>2</sub>. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102]

45. Source testing to measure startup and shutdown NO<sub>x</sub>, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (C-7286-1, C-7286-2, C-7286-3, or C-7286-4) prior to the end of the commissioning period and at least once every seven years thereafter. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR 60, Appendix B. If CEM data is not certifiable to determine compliance with NO<sub>x</sub> and CO startup emission limits, then source testing to measure startup NO<sub>x</sub> and CO mass emission rates shall be conducted at least once every 12 months. [District Rules 1081 and 2201]
46. Initial source testing to determine compliance with the NO<sub>x</sub>, CO and VOC emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) NH<sub>3</sub> emission rate (ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted within 120 days after initial operation. Initial source testing shall be conducted while unit C-7286-1 is operating independently and while unit C-7286-2 is operating independently and while units C-7286-1 and C-7286-2 are operating simultaneously. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400(a)]
47. Source testing to determine compliance with NO<sub>x</sub>, CO, VOC and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted at least once every 12 months. Source testing shall be conducted while units C-7286-1 and C-7286-2 are operating simultaneously. If unit C-7286-1 operates independently for more than 400 hours during any given calendar year, source testing shall also be conducted while unit C-7286-1 is operating independently. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400(a)]
48. The sulfur 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 within 60 days of the end of the commission period and weekly thereafter. If the sulfur content is demonstrated to be less than 1.0 gr/100 scf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume. [40 CFR 60.4360, 60.4365(a) and 60.4370(c)]
49. The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E or 20; CO - EPA Method 10 or 10B; VOC - EPA Method 18 or 25; PM<sub>10</sub> - EPA Method 5/202 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O<sub>2</sub> - EPA Method 3, 3A, or 20. EPA approved alternative test methods, as approved by the District, may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i)]
50. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)]



51. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]
52. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081 and 40 CFR 60.4375(b)]
53. The CTG shall be equipped with a continuous monitoring system to measure and record fuel consumption. [District Rules 2201 and 4703]
54. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO<sub>x</sub>, CO and O<sub>2</sub> concentrations. Continuous emissions monitor(s) shall be capable of monitoring emissions during normal operating conditions, and during startups and shutdowns provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)]
55. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)]
56. The NO<sub>x</sub>, CO and O<sub>2</sub> CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)]
57. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]

58. The owner/operator shall perform a relative accuracy test audit (RATA) for the NO<sub>x</sub>, CO and O<sub>2</sub> CEMS as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]
59. Results of the CEM system shall be averaged over a one hour period for NO<sub>x</sub> emissions and a three hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13]
60. Excess emissions shall be defined as any operating hour in which the 4-hour or 30-day rolling average NO<sub>x</sub> concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO<sub>x</sub> or O<sub>2</sub> (or both). [40 CFR 60.4380(b)(1)]
61. Results of continuous emissions monitoring shall be reduced according to the procedures established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
62. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
63. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
64. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080]
65. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO<sub>x</sub> emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395]

66. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080]
67. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]
68. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]
69. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 1080, 2201 and 4703 and 40 CFR 60.8(d)]
70. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NO<sub>x</sub> mass emission rates (lb/hr, lb/qtr and lb/twelve month rolling period). [District Rules 2201 and 4703]
71. All records shall be maintained and retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4703]
72. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021]
73. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021]
74. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021]

75. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011. [District Rules 8011 and 8051]
76. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061]
77. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
78. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071]
79. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
80. Whenever any portion of the site becomes inactive, Permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]
81. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]

**EQUIPMENT DESCRIPTION, UNIT C-7286-2-0:**

**30 MW NOMINALLY RATED SIMPLE-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A 311 MMBTU/HR PRATT & WHITNEY MODEL FT8-3 SWIFTPAC NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, WATER INJECTION, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND A OXIDATION CATALYST POWERING A 60 MW NOMINALLY RATED ELECTRICAL GENERATOR (SHARED WITH C-7286-1)**

1. Prior to initial operation of C-7286-1-0, C-7286-2-0, C-7286-3-0 or C-7286-4-0, permittee shall provide NO<sub>x</sub> (as NO<sub>2</sub>) emission reduction credits for the following quantities of emissions: 1st quarter – 8,968 lb; 2nd quarter – 8,968 lb; 3rd quarter – 15,692 lb; and 4th quarter - 11,208 lb. Offsets shall be provided at the appropriate distance ratio specified in Rule 2201. [District Rule 2201]
2. Prior to initial operation of C-7286-1-0, C-7286-2-0, C-7286-3-0 or C-7286-4-0, permittee shall provide PM<sub>10</sub> emission reduction credits for the following quantities of emissions: 1st quarter – 2,102 lb; 2nd quarter – 2,103 lb; 3rd quarter – 3,679 lb; and 4th quarter – 2,628 lb. Offsets shall be provided at the appropriate distance ratio specified in Rule 2201. SO<sub>x</sub> ERC's may be used to offset PM<sub>10</sub> increases at an interpollutant ratio of 1.867 lb-SO<sub>x</sub> : 1.0 lb-PM<sub>10</sub>. [District Rule 2201]
3. ERC certificate numbers (or any splits from these certificates) S-2382-2 and S-2492-5 shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this determination of compliance (DOC) shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of the DOC. [District Rule 2201]
4. Permittee shall submit an application to comply with SJVUAPCD District Rule 2520 - Federally Mandated Operating Permits within 12 months after commencing operation. [District Rule 2520]
5. Permittee shall submit an application to comply with SJVUAPCD District Rule 2540 - Acid Rain Program. [District Rule 2540]
6. District facilities C-3811 and C-7286 are the same stationary source for District permitting purposes. [District Rule 2201]
7. The owner/operator of the Starwood Power-Midway, LLC (Starwood Power) shall minimize the emissions from the gas turbine to the maximum extent possible during the commissioning period. Conditions #7 through #19 shall apply only during the commissioning period as defined below. Unless otherwise indicated, Conditions #20 through #81 shall apply after the commissioning period has ended. [District Rule 2201]
8. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning, and calibration activities recommended by the equipment manufacturers and the Starwood Power construction contractor to insure safe and reliable steady state operation of the gas turbines and associated electrical delivery systems. [District Rule 2201]

9. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when a gas turbine is first fired, whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing and is available for commercial operation. [District Rule 2201]
10. No more than one SwiftPac unit (two paired turbines operating under units C-7286-1 and C-7286-2 or C-7286-3 and C-7286-4) shall be operated at any one time during the commissioning period. [District Rule 2201]
11. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201]
12. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and the oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from this unit. [District Rule 2201]
13. Coincident with the steady-state operation of the SCR system and the oxidation catalyst, NO<sub>x</sub>, CO and VOC emissions from this unit shall comply with the limits specified in condition #29. [District Rule 2201]
14. The permittee shall submit a plan to the District at least four weeks prior to the first firing of this unit, describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the combustors, the installation and operation of the SCR systems and the oxidation catalyst, the installation, calibration, and testing of the NO<sub>x</sub> and CO continuous emissions monitors, and any activities requiring the firing of this unit without abatement by the SCR system or oxidation catalyst. [District Rule 2201]
15. Emission rates from this CTG, during the commissioning period, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 41.65 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr. [District Rule 2201]
16. During the commissioning period, the permittee shall demonstrate compliance with the NO<sub>x</sub> and CO limits specified in condition #15 through the use of properly operated and maintained continuous emissions monitors and recorders as specified in conditions #53 and 54. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). [District Rule 2201]
17. The continuous monitors specified in this permit shall be installed, calibrated, and operational prior to the first firing of this unit. After first firing, the detection range of the CEMS shall be adjusted as necessary to accurately measure the resulting range of NO<sub>x</sub> and CO emission concentrations. [District Rule 2201]

18. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 100 hours during the commissioning period. Such operation of this unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and the oxidation catalyst in place. Upon completion of these activities, the permittee shall provide written notice to the District and the unused balance of the 100 firing hours without abatement shall expire. [District Rule 2201]
19. The total mass emissions of NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, and SO<sub>x</sub> that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limits specified in condition #40. [District Rule 2201]
20. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine. Exhaust ducting may be equipped (if required) with a fresh air inlet blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. The permittee shall submit SCR and oxidation catalyst design details to the District at least 30 days prior to commencement of construction. [District Rule 2201]
21. Permittee shall submit continuous emission monitor design, installation, and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201]
22. The permittee shall submit to the District information correlating the NO<sub>x</sub> control system operating parameters to the associated measured NO<sub>x</sub> output. The information must be sufficient to allow the District to determine compliance with the NO<sub>x</sub> emission limits of this permit when no continuous emission monitoring data for NO<sub>x</sub> is available or when continuous emission monitoring system is not operating properly. [District Rule 4703]
23. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
24. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
25. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
26. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
27. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for up to three minutes in any hour. [District Rules 2201 and 4101]

28. This CTG shall be fired exclusively on PUC-regulated natural gas with a sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and 40 CFR 60.4330(a)(2)]
29. Emission rates from this CTG, except during startup and shutdown periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 2.8 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; CO – 4.19 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; VOC (as methane) – 0.82 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr. NO<sub>x</sub> (as NO<sub>2</sub>) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]
30. Combined emission rates from the CTG's operating under permit units C-7286-1 and C-7286-2, except during startup and shutdown periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 5.6 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; CO – 8.38 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; VOC (as methane) – 1.64 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>; PM<sub>10</sub> – 3.70 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 1.78 lb/hr. NO<sub>x</sub> (as NO<sub>2</sub>) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]
31. The ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 4.24 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> over a 24 hour rolling average. [District Rules 2201 and 4102]
32. During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 4.17 lb/hr; CO – 12.5 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr, based on a one hour average. [District Rules 2201 and 4703]
33. During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 1.50 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr, based on a one hour average. [District Rules 2201 and 4703]
34. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its SCR operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703]
35. The duration of each startup or shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703]
36. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703]
37. Daily emissions from the CTG shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 67.3 lb/day; CO – 126.0 lb/day; VOC – 19.7 lb/day; PM<sub>10</sub> – 44.4 lb/day; or SO<sub>x</sub> (as SO<sub>2</sub>) – 21.4 lb/day. [District Rule 2201]



38. Combined daily emissions from the CTG's operating under permit units C-7286-1 and C-7286-2 shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 134.6 lb/day; CO – 252.0 lb/day; VOC – 39.4 lb/day; PM<sub>10</sub> – 88.8 lb/day; or SO<sub>x</sub> (as SO<sub>2</sub>) – 42.8 lb/day. [District Rule 2201]
39. Quarterly hours of operation of this CTG shall not exceed any of the following limits: 1<sup>st</sup> Quarter - 800 hours, 2<sup>nd</sup> Quarter - 800 hours, 3<sup>rd</sup> Quarter - 1,400 hours, or 4<sup>th</sup> Quarter - 1,000 hours. [District Rule 2201]
40. Annual emissions from this CTG, calculated on a twelve month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 11,209 lb/year; CO – 19,546 lb/year; VOC – 3,320 lb/year; PM<sub>10</sub> – 7,400 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 3,560 lb/year. [District Rule 2201]
41. Combined annual emissions from the CTG's operating under permit units C-7286-1 and C-7286-2, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 22,416 lb/year; CO – 39,096 lb/year; VOC – 6,400 lb/year; PM<sub>10</sub> – 14,800 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 7,120 lb/year. [District Rule 2201]
42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. [District Rule 2201]
43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
44. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O<sub>2</sub>) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O<sub>2</sub>. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102]

45. Source testing to measure startup and shutdown NO<sub>x</sub>, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (C-7286-1, C-7286-2, C-7286-3, or C-7286-4) prior to the end of the commissioning period and at least once every seven years thereafter. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR 60, Appendix B. If CEM data is not certifiable to determine compliance with NO<sub>x</sub> and CO startup emission limits, then source testing to measure startup NO<sub>x</sub> and CO mass emission rates shall be conducted at least once every 12 months. [District Rules 1081 and 2201]
46. Initial source testing to determine compliance with the NO<sub>x</sub>, CO and VOC emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) NH<sub>3</sub> emission rate (ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted within 120 days after initial operation. Initial source testing shall be conducted while unit C-7286-1 is operating independently and while unit C-7286-2 is operating independently and while units C-7286-1 and C-7286-2 are operating simultaneously. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400(a)]
47. Source testing to determine compliance with NO<sub>x</sub>, CO, VOC and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted at least once every 12 months. Source testing shall be conducted while units C-7286-1 and C-7286-2 are operating simultaneously. If unit C-7286-2 operates independently for more than 400 hours during any given calendar year, source testing shall also be conducted while unit C-7286-2 is operating independently. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400(a)]
48. The sulfur 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 within 60 days of the end of the commission period and weekly thereafter. If the sulfur content is demonstrated to be less than 1.0 gr/100 scf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume. [40 CFR 60.4360, 60.4365(a) and 60.4370(c)]
49. The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E or 20; CO - EPA Method 10 or 10B; VOC - EPA Method 18 or 25; PM<sub>10</sub> - EPA Method 5/202 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O<sub>2</sub> - EPA Method 3, 3A, or 20. EPA approved alternative test methods, as approved by the District, may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i)]
50. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)]

51. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]
52. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081 and 40 CFR 60.4375(b)]
53. The CTG shall be equipped with a continuous monitoring system to measure and record fuel consumption. [District Rules 2201 and 4703]
54. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO<sub>x</sub>, CO and O<sub>2</sub> concentrations. Continuous emissions monitor(s) shall be capable of monitoring emissions during normal operating conditions, and during startups and shutdowns provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)]
55. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)]
56. The NO<sub>x</sub>, CO and O<sub>2</sub> CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)]
57. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]

58. The owner/operator shall perform a relative accuracy test audit (RATA) for the NO<sub>x</sub>, CO and O<sub>2</sub> CEMS as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]
59. Results of the CEM system shall be averaged over a one hour period for NO<sub>x</sub> emissions and a three hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13]
60. Excess emissions shall be defined as any operating hour in which the 4-hour or 30-day rolling average NO<sub>x</sub> concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO<sub>x</sub> or O<sub>2</sub> (or both). [40 CFR 60.4380(b)(1)]
61. Results of continuous emissions monitoring shall be reduced according to the procedures established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
62. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
63. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
64. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080]
65. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO<sub>x</sub> emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395]

66. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080]
67. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]
68. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]
69. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 1080, 2201 and 4703 and 40 CFR 60.8(d)]
70. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr, lb/qtr and lb/twelve month rolling period). [District Rules 2201 and 4703]
71. All records shall be maintained and retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4703]
72. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021]
73. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021]
74. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021]

75. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011. [District Rules 8011 and 8051]
76. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061]
77. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
78. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071]
79. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
80. Whenever any portion of the site becomes inactive, Permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]
81. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]

**EQUIPMENT DESCRIPTION, UNIT C-7286-3-0:**

**30 MW NOMINALLY RATED SIMPLE-CYCLE POWER GENERATING SYSTEM #3 CONSISTING OF A 311 MMBTU/HR PRATT & WHITNEY MODEL FT8-3 SWIFTPAC NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, WATER INJECTION, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND A OXIDATION CATALYST POWERING A 60 MW NOMINALLY RATED ELECTRICAL GENERATOR (SHARED WITH C-7286-4)**

1. Prior to initial operation of C-7286-1-0, C-7286-2-0, C-7286-3-0 or C-7286-4-0, permittee shall provide NO<sub>x</sub> (as NO<sub>2</sub>) emission reduction credits for the following quantities of emissions: 1st quarter – 8,968 lb; 2nd quarter – 8,968 lb; 3rd quarter – 15,692 lb; and 4th quarter - 11,208 lb. Offsets shall be provided at the appropriate distance ratio specified in Rule 2201. [District Rule 2201]
2. Prior to initial operation of C-7286-1-0, C-7286-2-0, C-7286-3-0 or C-7286-4-0, permittee shall provide PM<sub>10</sub> emission reduction credits for the following quantities of emissions: 1st quarter – 2,102 lb; 2nd quarter – 2,103 lb; 3rd quarter – 3,679 lb; and 4th quarter – 2,628 lb. Offsets shall be provided at the appropriate distance ratio specified in Rule 2201. SO<sub>x</sub> ERC's may be used to offset PM<sub>10</sub> increases at an interpollutant ratio of 1.867 lb-SO<sub>x</sub> : 1.0 lb-PM<sub>10</sub>. [District Rule 2201]
3. ERC certificate numbers (or any splits from these certificates) S-2382-2 and S-2492-5 shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this determination of compliance (DOC) shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of the DOC. [District Rule 2201]
4. Permittee shall submit an application to comply with SJVUAPCD District Rule 2520 - Federally Mandated Operating Permits within 12 months after commencing operation. [District Rule 2520]
5. Permittee shall submit an application to comply with SJVUAPCD District Rule 2540 - Acid Rain Program. [District Rule 2540]
6. District facilities C-3811 and C-7286 are the same stationary source for District permitting purposes. [District Rule 2201]
7. The owner/operator of the Starwood Power-Midway, LLC (Starwood Power) shall minimize the emissions from the gas turbine to the maximum extent possible during the commissioning period. Conditions #7 through #19 shall apply only during the commissioning period as defined below. Unless otherwise indicated, Conditions #20 through #81 shall apply after the commissioning period has ended. [District Rule 2201]
8. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning, and calibration activities recommended by the equipment manufacturers and the Starwood Power construction contractor to insure safe and reliable steady state operation of the gas turbines and associated electrical delivery systems. [District Rule 2201]

9. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when a gas turbine is first fired, whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing and is available for commercial operation. [District Rule 2201]
10. No more than one SwiftPac unit (two paired turbines operating under units C-7286-1 and C-7286-2 or C-7286-3 and C-7286-4) shall be operated at any one time during the commissioning period. [District Rule 2201]
11. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201]
12. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and the oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from this unit. [District Rule 2201]
13. Coincident with the steady-state operation of the SCR system and the oxidation catalyst, NO<sub>x</sub>, CO and VOC emissions from this unit shall comply with the limits specified in condition #29. [District Rule 2201]
14. The permittee shall submit a plan to the District at least four weeks prior to the first firing of this unit, describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the combustors, the installation and operation of the SCR systems and the oxidation catalyst, the installation, calibration, and testing of the NO<sub>x</sub> and CO continuous emissions monitors, and any activities requiring the firing of this unit without abatement by the SCR system or oxidation catalyst. [District Rule 2201]
15. Emission rates from this CTG, during the commissioning period, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 41.65 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr. [District Rule 2201]
16. During the commissioning period, the permittee shall demonstrate compliance with the NO<sub>x</sub> and CO limits specified in condition #15 through the use of properly operated and maintained continuous emissions monitors and recorders as specified in conditions #53 and 54. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). [District Rule 2201]
17. The continuous monitors specified in this permit shall be installed, calibrated, and operational prior to the first firing of this unit. After first firing, the detection range of the CEMS shall be adjusted as necessary to accurately measure the resulting range of NO<sub>x</sub> and CO emission concentrations. [District Rule 2201]



18. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 100 hours during the commissioning period. Such operation of this unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and the oxidation catalyst in place. Upon completion of these activities, the permittee shall provide written notice to the District and the unused balance of the 100 firing hours without abatement shall expire. [District Rule 2201]
19. The total mass emissions of NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, and SO<sub>x</sub> that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limits specified in condition #40. [District Rule 2201]
20. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine. Exhaust ducting may be equipped (if required) with a fresh air inlet blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. The permittee shall submit SCR and oxidation catalyst design details to the District at least 30 days prior to commencement of construction. [District Rule 2201]
21. Permittee shall submit continuous emission monitor design, installation, and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201]
22. The permittee shall submit to the District information correlating the NO<sub>x</sub> control system operating parameters to the associated measured NO<sub>x</sub> output. The information must be sufficient to allow the District to determine compliance with the NO<sub>x</sub> emission limits of this permit when no continuous emission monitoring data for NO<sub>x</sub> is available or when continuous emission monitoring system is not operating properly. [District Rule 4703]
23. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
24. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
25. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
26. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
27. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for up to three minutes in any hour. [District Rules 2201 and 4101]

28. This CTG shall be fired exclusively on PUC-regulated natural gas with a sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and 40 CFR 60.4330(a)(2)]
29. Emission rates from this CTG, except during startup and shutdown periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 2.8 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; CO – 4.19 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; VOC (as methane) – 0.82 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr. NO<sub>x</sub> (as NO<sub>2</sub>) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]
30. Combined emission rates from the CTG's operating under permit units C-7286-3 and C-7286-4, except during startup and shutdown periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 5.6 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; CO – 8.38 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; VOC (as methane) – 1.64 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>; PM<sub>10</sub> – 3.70 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 1.78 lb/hr. NO<sub>x</sub> (as NO<sub>2</sub>) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]
31. The ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 4.24 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> over a 24 hour rolling average. [District Rules 2201 and 4102]
32. During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 4.17 lb/hr; CO – 12.5 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr, based on a one hour average. [District Rules 2201 and 4703]
33. During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 1.50 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr, based on a one hour average. [District Rules 2201 and 4703]
34. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its SCR operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703]
35. The duration of each startup or shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703]
36. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703]
37. Daily emissions from the CTG shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 67.3 lb/day; CO – 126.0 lb/day; VOC – 19.7 lb/day; PM<sub>10</sub> – 44.4 lb/day; or SO<sub>x</sub> (as SO<sub>2</sub>) – 21.4 lb/day. [District Rule 2201]

38. Combined daily emissions from the CTG's operating under permit units C-7286-3 and C-7286-4 shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 134.6 lb/day; CO – 252.0 lb/day; VOC – 39.4 lb/day; PM<sub>10</sub> – 88.8 lb/day; or SO<sub>x</sub> (as SO<sub>2</sub>) – 42.8 lb/day. [District Rule 2201]
39. Quarterly hours of operation of this CTG shall not exceed any of the following limits: 1<sup>st</sup> Quarter - 800 hours, 2<sup>nd</sup> Quarter - 800 hours, 3<sup>rd</sup> Quarter - 1,400 hours, or 4<sup>th</sup> Quarter - 1,000 hours. [District Rule 2201]
40. Annual emissions from this CTG, calculated on a twelve month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 11,209 lb/year; CO – 19,546 lb/year; VOC – 3,320 lb/year; PM<sub>10</sub> – 7,400 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 3,560 lb/year. [District Rule 2201]
41. Combined annual emissions from the CTG's operating under permit units C-7286-3 and C-7286-4, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 22,416 lb/year; CO – 39,096 lb/year; VOC – 6,400 lb/year; PM<sub>10</sub> – 14,800 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 7,120 lb/year. [District Rule 2201]
42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. [District Rule 2201]
43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
44. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O<sub>2</sub>) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O<sub>2</sub>. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102]

45. Source testing to measure startup and shutdown NO<sub>x</sub>, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (C-7286-1, C-7286-2, C-7286-3, or C-7286-4) prior to the end of the commissioning period and at least once every seven years thereafter. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR 60, Appendix B. If CEM data is not certifiable to determine compliance with NO<sub>x</sub> and CO startup emission limits, then source testing to measure startup NO<sub>x</sub> and CO mass emission rates shall be conducted at least once every 12 months. [District Rules 1081 and 2201]
46. Initial source testing to determine compliance with the NO<sub>x</sub>, CO and VOC emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) NH<sub>3</sub> emission rate (ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted within 120 days after initial operation. Initial source testing shall be conducted while unit C-7286-3 is operating independently and while unit C-7286-4 is operating independently and while units C-7286-3 and C-7286-4 are operating simultaneously. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400(a)]
47. Source testing to determine compliance with NO<sub>x</sub>, CO, VOC and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted at least once every 12 months. Source testing shall be conducted while units C-7286-3 and C-7286-4 are operating simultaneously. If unit C-7286-3 operates independently for more than 400 hours during any given calendar year, source testing shall also be conducted while unit C-7286-3 is operating independently. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400(a)]
48. The sulfur 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 within 60 days of the end of the commission period and weekly thereafter. If the sulfur content is demonstrated to be less than 1.0 gr/100 scf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume. [40 CFR 60.4360, 60.4365(a) and 60.4370(c)]
49. The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E or 20; CO - EPA Method 10 or 10B; VOC - EPA Method 18 or 25; PM<sub>10</sub> - EPA Method 5/202 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O<sub>2</sub> - EPA Method 3, 3A, or 20. EPA approved alternative test methods, as approved by the District, may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i)]
50. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)]

51. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]
52. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081 and 40 CFR 60.4375(b)]
53. The CTG shall be equipped with a continuous monitoring system to measure and record fuel consumption. [District Rules 2201 and 4703]
54. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO<sub>x</sub>, CO and O<sub>2</sub> concentrations. Continuous emissions monitor(s) shall be capable of monitoring emissions during normal operating conditions, and during startups and shutdowns provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)]
55. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)]
56. The NO<sub>x</sub>, CO and O<sub>2</sub> CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)]
57. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]

58. The owner/operator shall perform a relative accuracy test audit (RATA) for the NO<sub>x</sub>, CO and O<sub>2</sub> CEMS as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]
59. Results of the CEM system shall be averaged over a one hour period for NO<sub>x</sub> emissions and a three hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13]
60. Excess emissions shall be defined as any operating hour in which the 4-hour or 30-day rolling average NO<sub>x</sub> concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO<sub>x</sub> or O<sub>2</sub> (or both). [40 CFR 60.4380(b)(1)]
61. Results of continuous emissions monitoring shall be reduced according to the procedures established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
62. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
63. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
64. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080]
65. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO<sub>x</sub> emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395]

66. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080]
67. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]
68. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]
69. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 1080, 2201 and 4703 and 40 CFR 60.8(d)]
70. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr, lb/qtr and lb/twelve month rolling period). [District Rules 2201 and 4703]
71. All records shall be maintained and retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4703]
72. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021]
73. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021]
74. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021]

75. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011. [District Rules 8011 and 8051]
76. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061]
77. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
78. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071]
79. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
80. Whenever any portion of the site becomes inactive, Permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]
81. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]



**EQUIPMENT DESCRIPTION, UNIT C-7286-4-0:**

**30 MW NOMINALLY RATED SIMPLE-CYCLE POWER GENERATING SYSTEM #4 CONSISTING OF A 311 MMBTU/HR PRATT & WHITNEY MODEL FT8-3 SWIFTPAC NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, WATER INJECTION, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND A OXIDATION CATALYST POWERING A 60 MW NOMINALLY RATED ELECTRICAL GENERATOR (SHARED WITH C-7286-3)**

1. Prior to initial operation of C-7286-1-0, C-7286-2-0, C-7286-3-0 or C-7286-4-0, permittee shall provide NO<sub>x</sub> (as NO<sub>2</sub>) emission reduction credits for the following quantities of emissions: 1st quarter – 8,968 lb; 2nd quarter – 8,968 lb; 3rd quarter – 15,692 lb; and 4th quarter - 11,208 lb. Offsets shall be provided at the appropriate distance ratio specified in Rule 2201. [District Rule 2201]
2. Prior to initial operation of C-7286-1-0, C-7286-2-0, C-7286-3-0 or C-7286-4-0, permittee shall provide PM<sub>10</sub> emission reduction credits for the following quantities of emissions: 1st quarter – 2,102 lb; 2nd quarter – 2,103 lb; 3rd quarter – 3,679 lb; and 4th quarter – 2,628 lb. Offsets shall be provided at the appropriate distance ratio specified in Rule 2201. SO<sub>x</sub> ERC's may be used to offset PM<sub>10</sub> increases at an interpollutant ratio of 1.867 lb-SO<sub>x</sub> : 1.0 lb-PM<sub>10</sub>. [District Rule 2201]
3. ERC certificate numbers (or any splits from these certificates) S-2382-2 and S-2492-5 shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this determination of compliance (DOC) shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of the DOC. [District Rule 2201]
4. Permittee shall submit an application to comply with SJVUAPCD District Rule 2520 - Federally Mandated Operating Permits within 12 months after commencing operation. [District Rule 2520]
5. Permittee shall submit an application to comply with SJVUAPCD District Rule 2540 - Acid Rain Program. [District Rule 2540]
6. District facilities C-3811 and C-7286 are the same stationary source for District permitting purposes. [District Rule 2201]
7. The owner/operator of the Starwood Power-Midway, LLC (Starwood Power) shall minimize the emissions from the gas turbine to the maximum extent possible during the commissioning period. Conditions #7 through #19 shall apply only during the commissioning period as defined below. Unless otherwise indicated, Conditions #20 through #81 shall apply after the commissioning period has ended. [District Rule 2201]
8. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning, and calibration activities recommended by the equipment manufacturers and the Starwood Power construction contractor to insure safe and reliable steady state operation of the gas turbines and associated electrical delivery systems. [District Rule 2201]

9. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when a gas turbine is first fired, whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing and is available for commercial operation. [District Rule 2201]
10. No more than one SwiftPac unit (two paired turbines operating under units C-7286-1 and C-7286-2 or C-7286-3 and C-7286-4) shall be operated at any one time during the commissioning period. [District Rule 2201]
11. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201]
12. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and the oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from this unit. [District Rule 2201]
13. Coincident with the steady-state operation of the SCR system and the oxidation catalyst, NO<sub>x</sub>, CO and VOC emissions from this unit shall comply with the limits specified in condition #29. [District Rule 2201]
14. The permittee shall submit a plan to the District at least four weeks prior to the first firing of this unit, describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the combustors, the installation and operation of the SCR systems and the oxidation catalyst, the installation, calibration, and testing of the NO<sub>x</sub> and CO continuous emissions monitors, and any activities requiring the firing of this unit without abatement by the SCR system or oxidation catalyst. [District Rule 2201]
15. Emission rates from this CTG, during the commissioning period, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 41.65 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr. [District Rule 2201]
16. During the commissioning period, the permittee shall demonstrate compliance with the NO<sub>x</sub> and CO limits specified in condition #15 through the use of properly operated and maintained continuous emissions monitors and recorders as specified in conditions #53 and 54. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). [District Rule 2201]
17. The continuous monitors specified in this permit shall be installed, calibrated, and operational prior to the first firing of this unit. After first firing, the detection range of the CEMS shall be adjusted as necessary to accurately measure the resulting range of NO<sub>x</sub> and CO emission concentrations. [District Rule 2201]

18. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 100 hours during the commissioning period. Such operation of this unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and the oxidation catalyst in place. Upon completion of these activities, the permittee shall provide written notice to the District and the unused balance of the 100 firing hours without abatement shall expire. [District Rule 2201]
19. The total mass emissions of NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, and SO<sub>x</sub> that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limits specified in condition #40. [District Rule 2201]
20. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine. Exhaust ducting may be equipped (if required) with a fresh air inlet blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. The permittee shall submit SCR and oxidation catalyst design details to the District at least 30 days prior to commencement of construction. [District Rule 2201]
21. Permittee shall submit continuous emission monitor design, installation, and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201]
22. The permittee shall submit to the District information correlating the NO<sub>x</sub> control system operating parameters to the associated measured NO<sub>x</sub> output. The information must be sufficient to allow the District to determine compliance with the NO<sub>x</sub> emission limits of this permit when no continuous emission monitoring data for NO<sub>x</sub> is available or when continuous emission monitoring system is not operating properly. [District Rule 4703]
23. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
24. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
25. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
26. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
27. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for up to three minutes in any hour. [District Rules 2201 and 4101]

28. This CTG shall be fired exclusively on PUC-regulated natural gas with a sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and 40 CFR 60.4330(a)(2)]
29. Emission rates from this CTG, except during startup and shutdown periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 2.8 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; CO – 4.19 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; VOC (as methane) – 0.82 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr. NO<sub>x</sub> (as NO<sub>2</sub>) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]
30. Combined emission rates from the CTG's operating under permit units C-7286-3 and C-7286-4, except during startup and shutdown periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 5.6 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; CO – 8.38 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; VOC (as methane) – 1.64 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>; PM<sub>10</sub> – 3.70 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 1.78 lb/hr. NO<sub>x</sub> (as NO<sub>2</sub>) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]
31. The ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 4.24 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> over a 24 hour rolling average. [District Rules 2201 and 4102]
32. During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 4.17 lb/hr; CO – 12.5 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr, based on a one hour average. [District Rules 2201 and 4703]
33. During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 1.50 lb/hr; CO – 21.33 lb/hr; VOC (as methane) – 0.83 lb/hr; PM<sub>10</sub> – 1.85 lb/hr; or SO<sub>x</sub> (as SO<sub>2</sub>) – 0.89 lb/hr, based on a one hour average. [District Rules 2201 and 4703]
34. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its SCR operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703]
35. The duration of each startup or shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703]
36. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703]
37. Daily emissions from the CTG shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 67.3 lb/day; CO – 126.0 lb/day; VOC – 19.7 lb/day; PM<sub>10</sub> – 44.4 lb/day; or SO<sub>x</sub> (as SO<sub>2</sub>) – 21.4 lb/day. [District Rule 2201]

38. Combined daily emissions from the CTG's operating under permit units C-7286-3 and C-7286-4 shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 134.6 lb/day; CO – 252.0 lb/day; VOC – 39.4 lb/day; PM<sub>10</sub> – 88.8 lb/day; or SO<sub>x</sub> (as SO<sub>2</sub>) – 42.8 lb/day. [District Rule 2201]
39. Quarterly hours of operation of this CTG shall not exceed any of the following limits: 1<sup>st</sup> Quarter - 800 hours, 2<sup>nd</sup> Quarter - 800 hours, 3<sup>rd</sup> Quarter - 1,400 hours, or 4<sup>th</sup> Quarter - 1,000 hours. [District Rule 2201]
40. Annual emissions from this CTG, calculated on a twelve month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 11,209 lb/year; CO – 19,546 lb/year; VOC – 3,320 lb/year; PM<sub>10</sub> – 7,400 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 3,560 lb/year. [District Rule 2201]
41. Combined annual emissions from the CTG's operating under permit units C-7286-3 and C-7286-4, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 22,416 lb/year; CO – 39,096 lb/year; VOC – 6,400 lb/year; PM<sub>10</sub> – 14,800 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 7,120 lb/year. [District Rule 2201]
42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. [District Rule 2201]
43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
44. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O<sub>2</sub>) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O<sub>2</sub>. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102]

45. Source testing to measure startup and shutdown NO<sub>x</sub>, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (C-7286-1, C-7286-2, C-7286-3, or C-7286-4) prior to the end of the commissioning period and at least once every seven years thereafter. CEM relative accuracy shall be determined during startup source testing in accordance with 40 CFR 60, Appendix B. If CEM data is not certifiable to determine compliance with NO<sub>x</sub> and CO startup emission limits, then source testing to measure startup NO<sub>x</sub> and CO mass emission rates shall be conducted at least once every 12 months. [District Rules 1081 and 2201]
46. Initial source testing to determine compliance with the NO<sub>x</sub>, CO and VOC emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) NH<sub>3</sub> emission rate (ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted within 120 days after initial operation. Initial source testing shall be conducted while unit C-7286-3 is operating independently and while unit C-7286-4 is operating independently and while units C-7286-3 and C-7286-4 are operating simultaneously. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400(a)]
47. Source testing to determine compliance with NO<sub>x</sub>, CO, VOC and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted at least once every 12 months. Source testing shall be conducted while units C-7286-3 and C-7286-4 are operating simultaneously. If unit C-7286-4 operates independently for more than 400 hours during any given calendar year, source testing shall also be conducted while unit C-7286-4 is operating independently. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400(a)]
48. The sulfur 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 within 60 days of the end of the commission period and weekly thereafter. If the sulfur content is demonstrated to be less than 1.0 gr/100 scf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume. [40 CFR 60.4360, 60.4365(a) and 60.4370(c)]
49. The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E or 20; CO - EPA Method 10 or 10B; VOC - EPA Method 18 or 25; PM<sub>10</sub> - EPA Method 5/202 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O<sub>2</sub> - EPA Method 3, 3A, or 20. EPA approved alternative test methods, as approved by the District, may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i)]
50. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)]

51. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]
52. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. 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. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081 and 40 CFR 60.4375(b)]
53. The CTG shall be equipped with a continuous monitoring system to measure and record fuel consumption. [District Rules 2201 and 4703]
54. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO<sub>x</sub>, CO and O<sub>2</sub> concentrations. Continuous emissions monitor(s) shall be capable of monitoring emissions during normal operating conditions, and during startups and shutdowns provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)]
55. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)]
56. The NO<sub>x</sub>, CO and O<sub>2</sub> CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 (PS 2), or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)]
57. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]

58. The owner/operator shall perform a relative accuracy test audit (RATA) for the NO<sub>x</sub>, CO and O<sub>2</sub> CEMS as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]
59. Results of the CEM system shall be averaged over a one hour period for NO<sub>x</sub> emissions and a three hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13]
60. Excess emissions shall be defined as any operating hour in which the 4-hour or 30-day rolling average NO<sub>x</sub> concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NO<sub>x</sub> or O<sub>2</sub> (or both). [40 CFR 60.4380(b)(1)]
61. Results of continuous emissions monitoring shall be reduced according to the procedures established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
62. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
63. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
64. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080]
65. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO<sub>x</sub> emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395]
66. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080]



67. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]
68. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]
69. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 1080, 2201 and 4703 and 40 CFR 60.8(d)]
70. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr, lb/qtr and lb/twelve month rolling period). [District Rules 2201 and 4703]
71. All records shall be maintained and retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4703]
72. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021]
73. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021]
74. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021]
75. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011. [District Rules 8011 and 8051]
76. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061]

77. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
78. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071]
79. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071]
80. Whenever any portion of the site becomes inactive, Permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]
81. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]