FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: INTERNAL COMBUSTION					
System 1: TURBINES					

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: INTERNAL COMBUSTION					
GAS TURBINE, GT-5, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000 PG SPRINT, COMBINED CYCLE, 547.5 MMBTU/HR HHV @ 64 DEG F, WITH WATER INJECTION A/N:	D56	C66		**CO**: 2 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT, 10-7-1988**]; **CO**: 2000 PPMV NATURAL GAS (5) [**RULE 407, 4-2-1982**]; **NOX**: 2 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011**]; **NOX**: 18.79 LBS/MMSCF NATURAL GAS (1A) [**RULE 2005, 6-3-2011**]; **NOX**: 25 PPMV NATURAL GAS (8) [**40CFR 60 Subpart KKKK, 7-6-2006**]; **NOX**: 42.83 LBS/MMSCF NATURAL GAS (1) [**RULE 2012, 5-6-2005**]; **PM**: 0.01 GRAINS/SCF NATURAL GAS (5A) [**RULE 475, 10-8-1976;** *RULE 475, 8-7-1978*]; **PM**: 0.1 GRAINS/SCF NATURAL GAS (5B) [**RULE 409, 8-7-1981**]; **PM**: 11 LBS/HR NATURAL GAS (5) [**RULE 475, 10-8-1976;** *RULE 475, 8-7-1978*]; **SO2**: (9) [**40CFR 72 - Acid Rain Provisions, 11-24-1997**]; **SO2**: 0.06 LBS/MMBTU NATURAL GAS (8) [**40CFR 60 Subpart KKKK, 7-6-2006**]; **VOC**: 2 PPMV NATURAL GAS (4) [**RULE 1303(a)(1)-BACT, 5-10-1996;** *RULE 1303(a)(1)*	A63.3, A99.8, A99.9, A99.10, A99.11, A195.8, A195.9, A195.10, A327.1, A433.1, A433.2, D29.6, D29.7, D29.8, D82.4, D82.5, E193.2, E193.3, H23.5, I297.1, K40.3, K67.7

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: INTERNAL COMBUSTION					
				-BACT, 12-6-2002]	
GENERATOR, SERVING GT-5, 56.1 GROSS MW @ 64 DEG F A/N:	B57				
STEAM TURBINE, ST-5, MAKE TBD, MODEL TBD A/N:	B64				
GENERATOR, SERVING ST-5, 14.7 GROSS MW @ 64 DEG F A/N:	B65				
CO OXIDATION CATALYST, NO.5, EMERACHEM, MODEL TBD, FIXED BED PLATINUM, VOLUME 100 CU FT A/N:	C66	D56 C67			
SELECTIVE CATALYTIC REDUCTION, NO. 5, HALDOR TOPSOE, MODEL TBD, CATALYST VOLUME 848 CU FT A/N:	C67	C66 S69		**NH3**: 5 PPMV NATURAL GAS (4) [**RULE 1303(a)(1) -BACT, 5-10-1996;** *RULE 1303(a)(1)-BACT, 12-6-2002*]	A195.11, D12.9, D12.10, D12.13, E179.3, E179.4, E179.6, E193.2
AMMONIA INJECTION, GRID, AQUEOUS AMMONIA A/N:	B68				
STACK, SERVING GT-5, HEIGHT: 125 FT ; DIAMETER: 10 FT 2.04 IN A/N:	S69	C67			

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: DEVICE ID INDEX

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.

FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: DEVICE ID INDEX

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FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[**RULE 401, 3-2-1984;** RULE 401, 11-9-2001]

F14.1 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

The 0.05 percent sulfur limit shall not apply to existing supplies of any liquid fuel in storage as of October 1, 1993 until such supply is exhausted.

[**RULE 431.2, 5-4-1990;** RULE 431.2, 9-15-2000]

F14.2 The operator shall not purchase fuel oil containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

[**RULE 431.2, 5-4-1990;** RULE 431.2, 9-15-2000]

F16.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

purchase records of fuel oil and sulfur content of the fuel

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997**]

FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

F18.1 Acid Rain SO2 Allowance Allocation for affected units are as follows:

Device ID	Boiler ID	Contaminant	Tons in any year
13	Broadway Unit No. B-1	SO2	126
14	Broadway Unit No. B-2	SO2	163
15	Broadway Unit No. B-3	SO2	74

a). The allowance allocation(s) shall apply to calendar years 2000 through 2009.

b). The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO2 allowance allocations identified in this permit (see 40 CFR 72.84)

[**40CFR 73 Subpart B, 1-11-1993**]

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[**40CFR 68 - Accidental Release Prevention, 5-24-1996**]

F52.1 This facility is subject to the applicable requirements of the following rules or regulation(s):

FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The facility shall submit a detailed retirement plan for the permanent shutdown of Boiler B-3 (Device 15), describing in detail the steps and schedule that will be taken to render Boiler B-3 inoperable.

The retirement plan must be submitted to AQMD within 60 days of permit issuance. AQMD shall notify PDWP whether the plan is approvable. If AQMD notifies PDWP that the plan is not approvable, PDWP shall submit a revised plan addressing AQMD's concerns within 30 days.

PDWP shall not commence any construction of equipment for the repower project before the retirement plan for permanent shut down of Boiler B-3 is approved in writing by AQMD.

PDWP shall provide AQMD with a notarized statement that Boiler B-3 is permanently shut down and that any re-start or operation of the unit shall require a new Permit to Construct and be subject to all requirements of nonattainment new source review and the prevention of significant deterioration program.

The notarized statement shall be submitted within 30 days following the permanent shutdown of Boiler B-3.

PDWP shall notify AQMD 30 days prior to the implementation of the approved retirement plan for permanent shut down of Boiler B-3.

[**RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996**]

DEVICE CONDITIONS

A. Emission Limits

A63.3 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 5,873 LBS IN ANY ONE MONTH

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The operator shall comply with the terms and conditions set forth below:

PM10	Less than or equal to 3,010 LBS IN ANY ONE MONTH
VOC	Less than or equal to 1,436 LBS IN ANY ONE MONTH
SOX	Less than or equal to 588 LBS IN ANY ONE MONTH

The above limits apply after the equipment is commissioned.

The operator shall calculate the monthly emission limit(s) by using calendar monthly fuel use data and the following emission factors: VOC: 3.48 lbs/mmscf, PM10: 7.30 lbs/mmscf, SOx: 1.43 lbs/mmscf.

The operator shall calculate the emission limit(s) for CO after the CO CEMS certification based upon readings from the AQMD certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated by using monthly fuel use data and the following factors: normal operation: 14.25 lbs/mmscf.

[**RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D56]

A99.8 The 42.83 LBS/MMSCF NOX emission limit(s) shall only apply during the interim reporting period during initial turbine commissioning to report RECLAIM emissions.

[**RULE 2012, 5-6-2005**]

[Devices subject to this condition : D56]

A99.9 The 18.79 LBS/MMSCF NOX emission limit(s) shall only apply during the interim reporting period after initial turbine commissioning to report RECLAIM emissions.

[**RULE 2012, 5-6-2005**]

[Devices subject to this condition : D56]

FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

A99.10 The 2.0 PPM NOX emission limit(s) shall not apply during turbine commissioning, start-up, shutdown, Water Injection and Intercooler Tuning (WIIT), and Ammonia Injection Grid Tuning (AIGT) periods. Start-up time shall not exceed 120 minutes for each start-up. Shutdown periods shall not exceed 60 minutes for each shutdown. The turbine shall be limited to a maximum of 5 start-ups per day, 155 start-ups per month, and 750 start-ups per year.

For the purposes of this condition, the beginning of start-up occurs at initial fire in the combustor of the combustion turbine through the full operation of the steam turbine generator. If during start-up, the process is aborted the process will count as one start-up.

For the purposes of this condition, shutdown shall be defined as the period of time from initiation of the shutdown sequence to cessation of firing.

For the purposes of this condition, WIIT shall be defined as the tuning of the gas turbine water injection and intercooler system. WIIT shall not exceed 12 hours. The operator shall limit the duration of WIIT to no more than 12 hours in any one month and 24 hours in any one year.

For the purposes of this condition, AIGT shall be defined as optimizing and re-balancing of the NH3 grid or catalyst modules, and the retuning of the turbine control systems. AIGT shall not exceed 10 hours. The operator shall limit the duration of AIGT to no more than 10 hours in any one year.

The commissioning period shall not exceed 204 hours.

[**RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011**]

[Devices subject to this condition : D56]

A99.11 The 2.0 PPM CO emission limit(s) shall not apply during turbine commissioning, start-up, shutdown, Water Injection and Intercooler Tuning (WIIT), and Ammonia Injection Grid Tuning (AIGT) periods. Start-up time shall not exceed 120 minutes for each start-up. Shutdown periods shall not exceed 60 minutes for each shutdown. The turbine shall be limited to a maximum of 5 start-ups per day, 155 start-ups per month, and 750 start-ups per year.

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PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

For the purposes of this condition, the beginning of start-up occurs at initial fire in the combustor of the combustion turbine through the full operation of the steam turbine generator. If during start-up, the process is aborted the process will count as one start-up

For the purposes of this condition, shutdown shall be defined as the period of time from initiation of the shutdown sequence to cessation of firing.

For the purposes of this condition, WIIT shall be defined as the tuning of the gas turbine water injection and intercooler system. WIIT shall not exceed 12 hours. The operator shall limit the duration of WIIT to no more than 12 hours in any one month and 24 hours in any one year.

For the purposes of this condition, AIGT shall be defined as shall be defined as optimizing and re-balancing of the NH3 grid or catalyst modules, and the retuning of the turbine control systems. AIGT shall not exceed 10 hours. The operator shall limit the duration of AIGT to no more than 10 hours in any one year.

The commissioning period shall not exceed 204 hours.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1703(a)(2) - PSD-BACT, 10-7-1988**]

[Devices subject to this condition : D56]

A195.8 The 2.0 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O2, dry.

[**RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011**]

[Devices subject to this condition : D56]

A195.9 The 2.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O2, dry.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1703(a)(2) - PSD-BACT, 10-7-1988**]

FACILITY PERMIT TO OPERATE
PASADENA CITY, DWP (EIS USE)

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D56]

A195.10 The 2.0 PPMV VOC emission limit(s) is averaged over 60 minutes at 15 percent O2, dry.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D56]

A195.11 The 5.0 PPMV NH3 emission limit(s) is averaged over 60 minutes at 15 percent O2, dry.

The operator shall calculate and continuously record the NH3 slip concentration using the following: NH3 (ppmv) = [a-b*c/1EE+06]*1EE+06/b, where: a = NH3 injection rate (lbs/hr)/17(lb/lb-mol), b = dry exhaust gas flow rate (scf/hr)/385.3 scf/lb-mol), c = change in measured NOx across the SCR (ppmvd at 15% O2).

The operator shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months.

The NOx analyzer shall be installed and operated within 90 days of initial start-up.

The operator shall use the above described method or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information without corroborative data using an approved reference method for the determination of ammonia.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C67]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

FACILITY PERMIT TO OPERATE
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The operator shall comply with the terms and conditions set forth below:

[**RULE 475, 10-8-1976;** RULE 475, 8-7-1978]

[Devices subject to this condition : D56]

A433.1 The operator shall comply at all times with the 2.0 ppm 1-hour BACT limit for NOx, except as defined in condition A99.10 and for the following scenarios:

Operating Scenario	Maximum Limit	Operational Limit
Start-up	28.68 lb	The mass emission limit shall be determined for start-up using CEMS minute by minute emission data. It shall be calculated to 120 minutes from the commencement of initial fire in the combustor
Shutdown	11.78 lb	The mass emission limit shall be determined for shutdown using CEMS minute by minute emission data. It shall be calculated to 60 minutes counted back from the cessation of firing

Records of minute by minute start-up and shutdown data shall be maintained and made available to the Executive Officer upon request.

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : D56]

A433.2 The operator shall comply at all times with the 2.0 ppm 1-hour BACT limit for CO, except as defined in condition A99.11 and for the following scenarios:

Operating Scenario	Maximum Limit	Operational Limit

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The operator shall comply with the terms and conditions set forth below:

Start-up	23.61 lb	The mass emission limit shall be determined for start-up using CEMS minute by minute emission data. It shall be calculated to 120 minutes from the commencement of initial fire in the combustor
Shutdown	9.90 lb	The mass emission limit shall be determined for shutdown using CEMS minute by minute emission data. It shall be calculated to 60 minutes counted back from the cessation of firing

Records of minute by minute start-up and shutdown data shall be maintained and made available to the Executive Officer upon request.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1703(a)(2) - PSD-BACT, 10-7-1988**]

[Devices subject to this condition : D56]

D. Monitoring/Testing Requirements

D12.9 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The temperature shall be between 600 degrees F and 900 degrees F.

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : C67]

D12.10 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The differential pressure shall less than 6.5 inches of water column.

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : C67]

D12.13 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH3).

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The ammonia injection rate shall be between 84 and 107 lbs/hr.

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : C67]

D29.6 The operator shall conduct source test(s) for the pollutant(s) identified below.

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The operator shall comply with the terms and conditions set forth below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet of the SCR serving this equipment
CO emissions	District method 100.1	1 hour	Outlet of the SCR serving this equipment
SOX emissions	AQMD Laboratory Method 307-91	Not Applicable	Fuel Sample
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	Approved District method	District-approved averaging time	Outlet of the SCR serving this equipment
PM2.5	Approved District method	District-approved averaging time	Outlet of the SCR serving this equipment
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet of the SCR serving this equipment

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after initial start-up. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate. The combined gas turbine and steam turbine generating output in MW shall also be recorded if applicable.

The test shall be conducted in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 90 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

For natural gas fired turbines only, an alternative to AQMD Method 25.3 for the purpose of demonstrating compliance with BACT as determined by CARB and AQMD, may be the following:

a) Triplicate stack gas samples are extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute,

b) Pressurization of the Summa canisters is done with zero gas analyzed/certified to containing less than 0.05 ppmv total hydrocarbons as carbon, and

c) Analysis of Summa canisters is per unmodified EPA Method TO-12 (with preconcentration) or the canister analysis portion of AQMD Method 25.3 with a minimum detection limit of 0.3 ppmvC or less and reported to two significant figures, and

c) Analysis of Summa canisters is per unmodified EPA Method TO-12 (with preconcentration) or the canister analysis portion of AQMD Method 25.3 with a minimum detection limit of 0.3 ppmvC or less and reported to two significant figures, and

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The operator shall comply with the terms and conditions set forth below:

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than unmodified AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD Method 25.3 without prior approval, except for the determination of compliance with the BACT level of 2.0 ppmv VOC calculated as carbon set by CARB for natural gas fired turbines. The test results shall be reported with two significant digits.

The test shall be conducted when this equipment is operating at loads of 100, 75 and 50 percent of maximum load for NOx, CO, VOC, and ammonia tests. The PM10 and PM2.5 tests shall be conducted when this equipment is operating at 100 percent of maximum load.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002; **RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011**]

[Devices subject to this condition : D56]

D29.7 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet of the SCR serving this equipment

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The operator shall comply with the terms and conditions set forth below:

The test shall be conducted and the results submitted to the District within 45 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 BACT concentration limit.

If the turbine is not in operation during one quarter, then no testing is required during that quarter.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D56]

D29.8 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
SOX emissions	AQMD Laboratory Method 307-91	Not Applicable	Fuel Sample
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	Approved District method	District-approved averaging time	Outlet of the SCR serving this equipment
PM2.5	Approved District method	District-approved averaging time	Outlet of the SCR serving this equipment

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The operator shall comply with the terms and conditions set forth below:

The test(s) shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted when the gas turbine is operating at 100 percent of maximum heat input.

For natural gas fired turbines only, an alternative to AQMD Method 25.3 for the purpose of demonstrating compliance with BACT as determined by CARB and AQMD, may be the following:

a) Triplicate stack gas samples are extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute,

b) Pressurization of the Summa canisters is done with zero gas analyzed/certified to containing less than 0.05 ppmv total hydrocarbons as carbon, and

c) Analysis of Summa canisters is per unmodified EPA Method TO-12 (with preconcentration) or the canister analysis portion of AQMD Method 25.3 with a minimum detection limit of 0.3 ppmvC or less and reported to two significant figures, and

d) The temperature of the Summa canisters when extracting samples for analysis is not to be below 70 degrees Fahrenheit.

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than unmodified AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD Method 25.3 without prior approval, except for the determination of compliance with the BACT level of 2.0 ppmv VOC calculated as carbon set by CARB for natural gas fired turbines. The test results shall be reported with two significant digits.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and/or monthly emission limit.

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The operator shall comply with the terms and conditions set forth below:

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D56]

D82.4 The operator shall install and maintain a CEMS to measure the following parameters:

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The operator shall comply with the terms and conditions set forth below:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed to measure CO concentrations over a 15 minute averaging time period.

The CEMS shall be installed no later than 90 days after initial start-up of the turbine, and in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD. Within two weeks of the turbine start-up, the operator shall provide written notification to the District of the exact date of start-up.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

CO Emission Rate, lbs/hr = K*Cco*Fd[20.9% - %O2 d)][(Qg * HHV)/106], where

K = 7.267 *10-8 (lb/scf)/ppm

Cco = Average of four consecutive 15 min. ave. CO concentration, ppm

Fd = 8710 dscf/MMBTU natural gas

%O2 d = Hourly ave. % by vol. O2 dry, corresponding to Cco

Qg = Fuel gas usage during the hour, scf/hr

HHV = Gross high heating value of fuel gas, BTU/scf

[**RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 218, 5-14-1999**]

[Devices subject to this condition : D56]

D82.5 The operator shall install and maintain a CEMS to measure the following parameters:

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PASADENA CITY, DWP (EIS USE)

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The operator shall comply with the terms and conditions set forth below:

NOX concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated no later than 90 days after initial start-up of the turbine, and in accordance with an approved AQMD REG XX CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD. Within two weeks of the turbine start-up, the operator shall provide written notification to the District of the exact date of start-up.

Rule 2012 provisional RATA testing shall be completed and submitted to the AQMD within 90 days of the conclusion of the turbine commissioning period. During the interim period between the initial start-up and provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3).

[**RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011; RULE 2012, 5-6-2005**]

[Devices subject to this condition : D56]

E. Equipment Operation/Construction Requirements

E179.3 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition Number D 12- 9

Condition Number D 12-11

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : C67]

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The operator shall comply with the terms and conditions set forth below:

E179.4 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that month.

Condition Number D 12-10

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : C67]

E179.6 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition Number D 12- 9

Condition Number D 12-13

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : C67]

E193.2 The operator shall restrict the operation of this equipment according to the following specifications:

In accordance with all air quality mitigation measures stipulated in the final Environmental Impact Report (EIR), State Clearing House #2011091056.

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D56, C67]

E193.3 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

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The operator shall comply with the terms and conditions set forth below:

The operator shall record the total net power generated in a calendar month in megawatt-hours.

The operator shall calculate and record greenhouse gas emissions of each calendar month using the following formula:

GHG = 59.187 * FF

Where, GHG is the greenhouse gas emissions in tons of CO2E and FF is the monthly fuel usage in millions standard cubic feet.

The GHG emissions from this equipment shall not exceed 280,502 tons per year. The average GHG emissions shall not exceed 1050 pounds per net megawatt-hours. The operator shall calculate and record the GHG emissions in tons per year and pounds per net megawatt-hours on a 12 month rolling average with a new monthly period starting at the beginning of each month.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition. The records shall be made available to AQMD upon request.

[RULE 1714, 11-5-2010]

[Devices subject to this condition : D56]

H. Applicable Rules

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	40CFR60, SUBPART	KKKK
SOX	40CFR60, SUBPART	KKKK

[**40CFR 60 Subpart KKKK, 7-6-2006**]

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The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D56]

I. Administrative

I297.1 This equipment shall not be operated unless the facility holds 56397 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : D56]

K. Record Keeping/Reporting

K40.3 The operator shall provide to the District a source test report in accordance with the following specifications:

FACILITY PERMIT TO OPERATE
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The operator shall comply with the terms and conditions set forth below:

Source test results shall be submitted to the District no later than 90 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lb/hr), and lb/MM cubic feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF and lbs/MMBtu.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), heating content of the fuel, the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002; **RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011**]

[Devices subject to this condition : D56]

K67.7 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas fuel use during the commissioning period.

[**RULE 2012, 5-6-2005**]

[Devices subject to this condition : D56]