

DOCKETED	
Docket Number:	01-AFC-06C
Project Title:	Magnolia Power Project-Compliance
TN #:	236747
Document Title:	MPP Title V Permit Issued January 28, 2021
Description:	N/A
Filer:	Claudia
Organization:	City of Burbank, Burbank Water and Power
Submitter Role:	Applicant
Submission Date:	2/11/2021 5:15:39 PM
Docketed Date:	2/12/2021



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

February 5, 2021

Jorge Somoano
General Manager
Burbank Water and Power
164 W Magnolia Blvd
Burbank, CA 91502

Subject: Title V Permit Revision (Facility ID# 128243)

Dear Mr. Somoano:

Please find enclosed the revised Title Page, Table of Contents, and Section H of your RECLAIM/Title V Facility Permit for equipment located at 156 W. Magnolia Blvd., Burbank, CA 91502. The revised sections reflect the approval of the minor permit revision requested in your Application No. 624212 to complete the combustor upgrade project and perform a one-time recommissioning operation. The proposed permit was submitted to USEPA on January 22, 2021 for their expedited review. The EPA has 45 days from receipt of the proposed permit and all necessary supporting documentation to object in writing to its issuance. The EPA has completed its review of the proposed permit package on January 26, 2021 and has no comments at this time.

The 60-day period for the public to petition the EPA to object to the permit begins the day after the EPA's 45-day review period. Also note, that if the permit is later found to require corrective steps (including, but not limited to, reopening the permit for cause), the expiration of both EPA's review period and the public petition period without EPA objection does not compromise the Agency's authority to take such measures.

The revised sections reflect the approval of the following permit action:

Equipment	Application No.	Device ID	Permit Type
Turbine	624214	D4	Permit to Construct

Please review the attached sections carefully. Insert the enclosed sections into your Title V Facility Permit and discard the earlier versions. If you determine there are administrative errors or if you have questions concerning your Title V permit, please contact Mr. Chris Perri at (909) 396-2696/cperri@aqmd.gov within 30 days of receipt of your permit.

Sincerely,

Thomas G. Liebel
Senior Engineering Manager
Engineering and Permitting

TGL:RC:CGP

Enclosure

cc: Gerardo Rios, US EPA Region IX
South Coast AQMD Compliance



FACILITY PERMIT TO OPERATE

**BURBANK CITY, BURBANK WATER & POWER, SCPPA
164 W MAGNOLIA BLVD
BURBANK, CA 91502**

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Wayne Nastri
Executive Officer

By Thomas H. Liebel
Amir Dejbakhsh
Deputy Executive Officer
Engineering and Permitting



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPA

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**FACILITY PERMIT TO OPERATE
BURBANK CITY,BURBANK WATER & POWER,SCPPA**

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[illegible]

- | | |
|--|---|
| * (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 BURBANK CITY, BURBANK WATER & POWER, SCPPA

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 3: INTERNAL COMBUSTION: POWER GENERATION					
BURNER, DUCT, NATURAL GAS, 583 MMBTU/HR A/N: 624214 Permit to Construct Issued: 01/28/21	D6		NOX: MAJOR SOURCE**	CO: 2 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.2 LBS/MMBTU (8B) [40CFR 60 Subpart Da, 10-4-1991]; NOX: 2 PPMV (4) [RULE 2005, 5-6-2005]; NOX: 114 PPMV NATURAL GAS (8A) [40CFR 60 Subpart GG, 3-6-1981]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.03 LBS/MMBTU (8A) [40CFR 60 Subpart Da, 10-4-1991]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: 11 LBS/HR (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: 0.2 LBS/MMBTU (8A) [40CFR 60 Subpart Da, 10-4-1991]; SOX: 150 PPMV (8A) [40CFR 60 Subpart GG, 3-6-1981]; VOC: 2 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A63.1, A195.2, A195.3, A195.4, A327.1, C1.1, C1.2, C1.3, D29.3, D82.1, D82.2, E57.1, E193.1, I298.2, K67.2

- * (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
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(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 BURBANK CITY, BURBANK WATER & POWER, SCPPA

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 3: INTERNAL COMBUSTION: POWER GENERATION					
CO OXIDATION CATALYST, SERVING UNIT NO. 1, EMERCHAM, WITH 334.1 CUBIC FEET CATALYST VOLUME, ENGELHARD, WITH 360 CUBIC FEET CATALYST VOLUME, HEIGHT: 67 FT, WIDTH: 26 FT, DEPTH: 3 IN A/N: 613507 Permit to Construct Issued: 01/10/20	C9				
SELECTIVE CATALYTIC REDUCTION, SERVING UNIT NO. 1, HEIGHT: 66 FT 6 IN, WIDTH: 25 FT 1 IN, DEPTH: 3 IN, 1100 CU.FT.; WIDTH: 26 FT ; HEIGHT: 67 FT ; LENGTH: 1 FT 4 IN WITH A/N: 613507 Permit to Construct Issued: 01/10/20 AMMONIA INJECTION, GRID	C10			NH3: 5 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.1, D12.1, D12.2, D12.3, D29.1, E73.1, E193.1
STACK, NO.1, HEIGHT: 150 FT ; DIAMETER: 19 FT A/N: 624214 Permit to Construct Issued: 01/28/21	S12				

- * (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.



South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

Section H	Page: 4
Facility ID:	128243
Revision #:	8
Date:	January 28, 2021

FACILITY PERMIT TO OPERATE BURBANK CITY,BURBANK WATER & POWER,SCPPA

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
BURBANK CITY, BURBANK WATER & POWER, SCPPA**

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D4	1	3	0
D6	2	3	0
C9	3	3	0
C10	3	3	0
S12	3	3	0



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

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]

F67.1 The facility operator shall comply with all terms and conditions specified below.

Continuous operation of monitoring systems not subject to Rule 218 are not required when necessary calibration, maintenance or repair activities are performed in accordance with manufacturer's recommendation. The operator shall take all reasonable actions to minimize the time required to perform such activities. In no event shall any such activities exceed 96 consecutive hours for any one calibration, maintenance, or repair episode.

The operator shall notify the Executive Officer within 24 hours of the start of a calibration, maintenance, or repair activity, if the activity is expected to last more than 24 consecutive hours.

[RULE 204, 10-8-1993]

DEVICE CONDITIONS

A. Emission Limits



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

A63.1 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 9243 LBS IN ANY ONE MONTH
PM10	Less than or equal to 9552 LBS IN ANY ONE MONTH
VOC	Less than or equal to 3744 LBS IN ANY ONE MONTH
SOX	Less than or equal to 1022 LBS IN ANY ONE MONTH

The operator shall calculate the emission limit(s) by using the monthly fuel use data and the following emissions factors: PM10 with duct firing = 7.98 lb/MMscf, PM10 without duct firing = 6.93 lb/MMscf, VOC with duct ring = 2.69 lb/MMscf, VOC without duct firing = 2.69 lb/MMscf, VOC startups = 30 lb/event, VOC shutdown = 17 lb/event, SOx = 0.75 lb/MMscf.

The operator shall calculate the emission limit(s) for CO, after the CO CEMS certification based upon the 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 in accordance with the approved CEMS plan.

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from equipment D4 (Gas Turbine 1) and D6 (Duct Burner).

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

[Devices subject to this condition : D4, D6]

A195.1 The 5 PPMV NH₃ emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry. The operator shall continuously record the NH₃ slip concentration using the following:.



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

An exhaust gas sampling system consisting of an exhaust gas probe in the stack at the outlet of the SCR sending exhaust sample to both an analyzer measuring NOx only (unconverted sample) and an analyzer utilizing an NH₃ to NOx converter and measuring total nitrogen, including NOx and NH₃ (converted sample)..

The following equation is used to calculate NH₃ slip:.

NH₃ slip, ppm = NOx, ppm (Converted sample) - NOx, ppm (Total, unconverted sample).

The monitoring device shall monitor and record NH₃ concentrations and alert the operator (via audible or visible alarm) whenever NH₃ concentrations are near, at, or in excess of the permitted NH₃ limit of 5 ppmv, corrected to 15 percent oxygen. It shall also record the date, time, extent (in time) of all excursions above 5 ppmv, corrected to 15 percent oxygen..

The continuous emission monitoring device described above shall be operated and maintained according to a Quality Assurance Plan (QAP) approved by the Executive Officer. The QAP must address contingencies for monitored ammonia concentrations near, at, or above the permitted compliance limit, and remedial actions to reduce ammonia levels once an exceedance has occurred..

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..

The SCAQMD may require the installation of a CEMS designed to monitor ammonia concentration if the SCAQMD determines that a commercially available CEMS has been proven to be accurate and reliable and that an adequate Quality Assurance/Quality Control (QA/QC) protocol has been established. The SCAQMD or other agency must establish an SCAQMD approved QA/QC protocol prior to the ammonia CEMS becoming a requirement..

In the event that an ammonia CEMS is installed, the ammonia slip calculation and annual ammonia slip testing requirement shall no longer be required..

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



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

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 : C10]

A195.2 The 2 PPMV NOX emission limit(s) is averaged over 3 hours at 15 percent oxygen, dry.

The 2.0 PPM NOX emission limit shall not apply during startup, recommissioning, and shutdown periods. Startup time shall not exceed 6 hours per startup per day. NOx emissions during the 6 hours after commencement of a start up shall not exceed 440 lbs. Shutdown time shall not exceed 30 minutes per shutdown per day. NOx emissions during the 30 minutes prior to the conclusion of a shutdown shall not exceed 25 lbs. The operator shall limit the number of start ups to 5 per month.

The operator shall keep records of the date, time and duration as well as minute by minute data (NOx, CO and O2 concentration and fuel flow rate at a minimum) of each startup and shutdown

Recommissioning is a one time event that shall not exceed 159.6 turbine operating hours and 214 mmscf of fuel use. Once started, the recommissioning shall be completed within 60 days. The NOx emissions during recommissioning shall not exceed 198 lbs/hr and 4115 total lbs as determined through the use of the certified CEMS.

The operator shall keep records of the date and time the turbine is operated during recommissioning, the duration of the operation, the fuel use and the NOx and CO emissions. The operator shall notify AQMD prior to the start of the recommissioning operation and at the conclusion of the recommissioning operation..

[RULE 2005, 6-3-2011]

[Devices subject to this condition : D4, D6]

A195.3 The 2 PPMV CO emission limit(s) is averaged over 1 hour at 15 percent oxygen, dry.



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The 2.0 PPM CO emission limit shall not apply during startup, recommissioning, and shutdown periods. Startup time shall not exceed 6 hours per startup per day. Shutdown time shall not exceed 30 minutes per shutdown per day. CO emissions during the 30 minutes prior to the conclusion of a shutdown shall not exceed 120 lbs. The operator shall limit the number of start ups to 5 per month.

The operator shall keep records of the date, time and duration as well as minute by minute data (NO_x, CO and O₂ concentration and fuel flow rate at a minimum) of each startup and shutdown

Recommissioning is a one time event that shall not exceed 159.6 turbine operating hours and 214 mmscf of fuel use. Once started, the recommissioning shall be completed within 60 days. The CO emissions during recommissioning shall not exceed 84 lbs/hr, 792 lbs in any one day, and 1439 lbs total as determined by the certified CEMS.

The operator shall keep records of the date and time the turbine is operated during recommissioning, the duration of the operation, the fuel use, and the NO_x and CO emissions. The operator shall notify AQMD prior to the start of the recommissioning operation and at the conclusion of the recommissioning operation.

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

[Devices subject to this condition : D4, D6]

A195.4 The 2 PPMV VOC emission limit(s) is averaged over 1 hour at 15 percent, dry.



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The 2.0 VOC emission limit shall not apply during recommissioning. Recommissioning is a one time event that shall not exceed 159.6 turbine operating hours and 214 mmscf of fuel use. Once started, the recommissioning shall be completed within 60 days.

The operator shall keep records of the date and time the turbine is operated during recommissioning, the duration of the operation, the fuel use and the NO_x and CO emissions. The operator shall notify AQMD prior to the start of the recommissioning operation and at the conclusion of the recommissioning operation.

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

[Devices subject to this condition : D4, D6]

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.

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

[Devices subject to this condition : D4, D6]

C. Throughput or Operating Parameter Limits

C1.1 The operator shall limit the fuel usage to no more than 555 MM cubic feet per year.

**[RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002;
RULE 2005, 6-3-2011]**

[Devices subject to this condition : D6]

C1.2 The operator shall limit the fuel usage to no more than 6.66 MM cubic feet per day.

[RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002]



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

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 : D6]

- C1.3 The operator shall limit the fuel usage to no more than 133 MM cubic feet per month.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 6-3-2011]

[Devices subject to this condition : D6]

- C1.5 The operator shall limit the operating time to no more than 7914 hour(s) in any one year.

The limit applies only to the 12 month period beginning from the start of the recommissioning operation in 2020. The hours counted towards the limit shall include normal operation with and without duct firing and start up and shutdown time but does not include operation during recommissioning..

[RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 2005, 12-4-2015]

[Devices subject to this condition : D4]

- C1.6 The operator shall limit the operating time to no more than 8096 in any 12-month period.

The limit applies only to the 12 month period beginning from the start of the recommissioning in 2021. The hours counted towards the limit shall include normal operation with and without duct firing and start up and shutdown time but does not include operation during recommissioning..

[Devices subject to this condition : D4]

D. Monitoring/Testing Requirements



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

- D12.1 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia. The operator shall continuously record the flow rate with a measuring device or gauge accurate to +/- 5 percent, calibrated once every 12 months. 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 hour..

The operator shall maintain the flow rate between 50 and 350 lbs per hour, except during start up, shutdown, and recommissioning.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-6-2005]

[Devices subject to this condition : C10]

- D12.2 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the exhaust at the inlet to the SCR reactor. The operator shall continuously record the temperature with a measuring device or gauge accurate to +/- 5 percent, calibrated once every 12 months.. 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 hour..

The operator shall maintain the exhaust temperature at the inlet of the SCR between 450 and 900 deg F. except during start up, shutdown, and recommissioning

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-6-2005]

[Devices subject to this condition : C10]

- D12.3 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the the SCR catalyst bed in inches of water column. The operator shall continuously record the pressure with a measuring device or gauge accurate to +/- 5 percent, calibrated once every 12 months. . Continuously record shall be defined as recording at least once every month and shall be calculated based upon the average of the continuous monitoring for that month..



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The operator shall maintain the differential pressure across the SCR catalyst bed between 1.0 and 5 inches water column, except during start up, shutdown, and recommissioning.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-6-2005]

[Devices subject to this condition : C10]

D29.1 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	1 hour	Outlet of the SCR



FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

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 to demonstrate compliance with the rule 1303 concentration limit.

The test shall be conducted at least every calendar year. If the results of any calendar year test show non-compliance with the limit, then quarterly tests must be conducted and at least 4 consecutive tests must show compliance with the limit before calendar year testing can resume..

The NO_x 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 NO_x emissions using District Method 100.1 measured over a 60 minute averaging time period.

An ammonia slip test shall be conducted within 90 days after completion of the recommissioning. The test shall be conducted at 3 gas turbine loads, 1) as close to 27% as practicable but not more than 37% 2) as close to 100% as practicable, but not less than 90%, and 3) one intermediate load. The intent of the test is to determine compliance with the ammonia slip limit after combustor upgrades but can also be used to satisfy the annual slip test requirement.

The test shall be conducted and the results submitted to the AQMD 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.

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

[Devices subject to this condition : C10]

D29.3 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	District-approved averaging time	Fuel Sample
ROG emissions	Approved District method	1 hour	Outlet of the SCR



FACILITY PERMIT TO OPERATE BURBANK CITY,BURBANK WATER & POWER,SCPPA

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

PM emissions	EPA Method 201A/District Method 5.1	District-approved averaging time	Outlet of the SCR
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FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER, SCPPA

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 to demonstrate compliance with the Rule 1303 concentration and/or monthly emissions limit.

The test shall be conducted at least once every 3 yrs. AQMD shall be notified of the date & time of the test at least 10 days prior to the test. The test shall be conducted 1) when the turbine and duct burner are operating simultaneously at 100% of max heat input, or as close as practicable, but not less than 90% of max heat input and 2) when the turbine is operating alone at 100% of max heat input, or as close as practicable, but not less than 90% of max heat input.

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

- a) Triplicate stack gas samples extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute,
- b) Pressurization of the Summa canisters with zero gas analyzed/certified to less than 0.05 ppmv total hydrocarbons as carbon, and
- c) Analysis of Summa canisters per unmodified EPA Method TO-12 (with pre-concentration) 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. The temperature of the Summa canisters when extracting the samples for analysis shall not be below 70 F

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 ROG calculated as carbon set by CARB for natural gas fired turbines.

Source test results shall be submitted to the AQMD no later than 60 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 (lbs/hr), and lbs/MM Cubic Feet. In



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

addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

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), the flue gas temperature, and the generator power output (MW) and duct burner input (mmbtu/hr) 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]

[Devices subject to this condition : D4, D6]

D82.1 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

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

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

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

CO Emission Rate, lbs/hr = $K \cdot C_{co} \cdot F_d \left[\frac{20.9}{(20.9\% - \%O_2 d)} \right] \left[\frac{(Q_g \cdot HHV)}{10E6} \right]$,
where

1. $K = 7.267 \cdot 10^{-8}$ (lbs/scf)/ppm
2. C_{co} = Average of 4 consecutive 15 min. average CO concentrations, ppm
3. F_d = 8710 dscf/MMBTU natural gas
4. $\%O_2, d$ = Hourly average % by volume O2 dry, corresponding to C_{co}
5. Q_g = Fuel gas usage during the hour, scf/hr
6. HHV = Gross high heating value of the fuel gas, BTU/scf

The CEMS shall be installed and operated in accordance with an AQMD approved Rule 218 CEMS plan application.

[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 : D4, D6]

D82.2 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:

NOX concentration in ppmv

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

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D4, D6]

E. Equipment Operation/Construction Requirements

- E57.1 The operator shall vent this equipment to the CO oxidation and SCR control whenever this equipment is in operation..

[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 2005, 6-3-2011]

[Devices subject to this condition : D4, D6]

- E73.1 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use ammonia injection if all of the following requirement(s) are met:

The SCR inlet exhaust temperature is 450 degrees F or less not to exceed 6 hours during a startup and 0.5 hours during a shutdown.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 6-3-2011]

[Devices subject to this condition : C10]

- E193.1 The operator shall construct, operate, and maintain this equipment according to the following specifications:

In accordance with all mitigation measures stipulated in the Final California Energy Commission Certificate for 01-AFC-6 prepared for this project.

[CA PRC CEQA, 11-23-1970]



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

[Devices subject to this condition : D4, D6, C10]

I. Administrative

- I298.1 This equipment shall not be operated unless the facility holds 132444 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 132444 pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual 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 : D4]

- I298.2 This equipment shall not be operated unless the facility holds 4300 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 4300 pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual 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.



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

[RULE 2005, 6-3-2011]

[Devices subject to this condition : D6]

K. Record Keeping/Reporting

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas fuel use.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 2012, 5-6-2005]

[Devices subject to this condition : D4, D6]