

ORIGINAL

Rv 4/18/24

PETITION FOR VARIANCE
BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

SOUTH COAST AQMD
CLERK OF THE BOARDS
2024 MAR 12 AM 11:43

PETITIONER: City of Burbank, Burbank Water and Power

CASE NO: 1474-30

FACILITY ID: 025638

FACILITY ADDRESS: 164 West Magnolia Blvd.

[location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]

City, State, Zip: Burbank, CA 91502

1. TYPE OF VARIANCE REQUESTED (more than one box may be checked; see Attachment A, Item 1, before selecting)

- INTERIM
- SHORT
- REGULAR
- EMERGENCY
- EX PARTE EMERGENCY

2. CONTACT: Name, title, company (if different than Petitioner), address, and phone number of persons authorized to receive notices regarding this Petition (no more than two authorized persons).

Frank Messineo

Alene Taber

Burbank Water and Power

Hanson Bridgett LLP

164 W. Magnolia Blvd.

777 S. Figueroa Street

Burbank, CA Zip 91502

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3. RECLAIM Permit Yes No

Title V Permit Yes No

4. **GOOD CAUSE:** Explain why your petition was not filed in sufficient time to issue the required public notice. (Required only for Emergency and Interim Variances; see Attachment A, Item 4)

Not applicable as the application is being submitted in sufficient time for public notice.

5. Briefly describe the type of business and processes at your facility.

Burbank Water and Power (BWP) is a municipal utility responsible for providing safe and reliable power to its customers at stable and competitive rates. At this facility, BWP currently operate one simple cycle combustion turbine, Lake No. 1 (D 50).

6. List the equipment and/or activity(s) that are the subject of this petition (see Attachment A, Item 6, Example #1). **Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate for the subject equipment. For RECLAIM or Title V facilities, attach *only* the relevant sections of the Facility Permit showing the equipment or process and conditions that are subject to this petition. You must bring the entire Facility Permit to the hearing.**

Equipment/Activity	Application/Permit No.	RECLAIM Device No.	Date Application/Plan Denied (if relevant)*
Lake 1 Turbine	A/N 638322/638323 Facility ID 025638	D 50	N/A
SCR Catalyst	A/N 638322/638323 Facility ID 025638	C 53	N/A

*Attach copy of denial letter

7. Briefly describe the activity or equipment, and why it is necessary to the operation of your business. A schematic or diagram may be attached, in addition to the descriptive text.

Lake 1, a LM6000 natural gas combustion turbine generator, was put into service on June 28, 2002. BWP installed Lake 1 to upgrade its power generating facility to meet increasing power generating demands. The unit is dispatched to meet energy demand as well as operating reserve requirements and/or voltage support to the entire Burbank electric network during times of outages or emergencies. Lake 1 is the primary power generating unit for the facility, allowing BWP to provide its customers with cost effective and reliable electric power. The Lake 1 unit is essential to meeting increased power demands during summer months when power may not be able to be purchased.

8. Is there a regular maintenance and/or inspection schedule for this equipment? Yes No

If yes, how often: Annually Date of last maintenance and/or inspection January 9, 2024

Describe the maintenance and/or inspection that was performed.

Daily visual inspection is performed by operators and technician during their rounds. The SCR and fuel gas instruments are calibrated annually, and the most recent calibration occurred on May 1, 2023. Lake 1 unit CEMS semi-annual preventive maintenance was completed on October 4, 2023. Borescope inspection of the gas turbine, generator inspection, balance of plant work and controls calibration occurred on January 9, 2024.

9. List all District rules, and/or permit conditions [indicating the specific section(s) and subsection(s)] from which you are seeking variance relief (if requesting variance from Rule 401 or permit condition, see Attachment A). Briefly explain how you are or will be in violation of each rule or condition (see Attachment A, Item 9, Example #2).

Rule	Explanation
Section D, page 13, "Facility Description and Equipment Specific Conditions" section for Lake 1 gas turbine. Condition A99.8 Device D50	This section of the permit requires the SCR commissioning to be completed within 90 consecutive days. Additional information is provided under Item 14.
Section H, page 11, "Permit to Construct and Temporary Permit to Operate" section for Lake 1 gas turbine. Condition A195.6 Device D50	This section of the permit requires the SCR commissioning to be completed within 90 consecutive days.

10. Are the equipment or activities subject to this request currently under variance coverage? Yes No

Case No.	Date of Action	Final Compliance Date	Explanation

11. Are any other equipment or activities at this location currently (or within the last six months) under variance coverage? Yes No

Case No.	Date of Action	Final Compliance Date	Explanation

12. Were you issued any Notice(s) of Violation or Notice(s) to Comply concerning this equipment or activity within the past year? Yes No

If yes, you must attach a copy of each notice.

13. Have you received any complaints from the public regarding the operation of the subject equipment or activity within the last six months? Yes No

If yes, you should be prepared to present details at the hearing.

14. Explain why it is beyond your reasonable control to comply with the rule(s) and/or permit condition(s). Provide specific event(s) and date(s) of occurrence(s), if applicable.

A permit to construct was issued on September 21, 2023, to Facility ID 025638 to implement the Lake One Retrofit project that would reduce the Lake one unit NOx emissions from 5 ppmv to 2.5 ppmv as required by SCAQMD Rule 1135.

The project consists of relocating/redesigning the existing ammonia injection system, upgrading the tempering air system and replacing both SCR and CO catalyst with a single, more effective multi-pollutant catalyst. The project requires a commissioning period in order to balance the ammonia injection system and ensure proper NOx control with minimal ammonia slip.

Permit conditions A99.8 and A195.6 allow for a one-time SCR commissioning event upon installation of the Umicore control system. Once the SCR commissioning has started, permit conditions require it shall be completed within 90 consecutive days.

The Lake One Retrofit project commissioning period started on January 24, 2024, therefore the 90- day commissioning period ends on April 23, 2024. Once the commissioning period began, the new multi-pollutant catalyst was not able to reduce NOx emissions to the required emission limit of 2.5 ppmv. The commissioning period only lasted one day. Several tests were performed on the catalyst by the manufacturer, Umicore, and third-party consultant, FERCo, to identify a solution to the performance issues. On February 16, 2024, Umicore provided BWP with a recommendation to add additional volume of SCR catalyst to be able to reduce emissions further and meet the 2.5 ppmv limit. Manufacturing of the new catalyst began on February 19, 2024; however, manufacturing will take approximately 6-7 weeks with additional time needed for installation and testing, and then commissioning can start again. It is important to be able to have full 90 days to complete the commissioning of the revised system to ensure it is working properly and achieving the required standard. Therefore, BWP is requesting a regular variance to restart the Lake One Retrofit commissioning period allowed by the permit to construct.

Timeline:

1. Construction outage began on October 4, 2023.
2. Construction outage completed on January 19, 2024.
3. Pre-commissioning (i.e. loop checks, visual inspection, etc.) of the new system began on January 22, 2024.
4. Commissioning of the new ammonia injection system began on January 24, 2023. The Lake unit was started around 07:30AM in order to begin the commissioning. The plant was shut down around 04:00PM. The commissioning lasted a single day.
5. During the commissioning it was determined through the CEMS monitoring that NOx emissions were not reduced to the emission limit of 2.5 ppmv. Therefore, commissioning was stopped.
6. FERCo returned to the site on Friday, January 26, 2024, to take XRF measurements of the catalyst, as well as take two catalyst test coupons to test in their lab.
7. FERCo reported that on Monday, January 29, 2024, FERCo replicated emissions results in their lab. At this time, FERCo determined that the new catalyst was not performing as designed to reduce NOx concentration to 2.5 ppmv.
8. Umicore (catalyst OEM) began testing alternate catalyst arrangements and working to provide a solution to the performance issues.
9. February 16, 2024, Umicore provided a catalyst lab test report with a recommendation to add additional volume of SCR catalyst. This new arrangement was tested in a lab, which demonstrated that with the increase in the volume of the new catalyst, SCR was able to meet the performance requirements, including the reduction of NOx concentration to 2.5 ppmv.
10. February 16, 2024, BWP gave Umicore approval to begin manufacturing additional catalyst.

Manufacturing started during the week of February 19, 2024.

11. Manufacturing is expected to take approximately six-seven weeks.
12. Catalyst is expected to arrive to site week of April 8, 2024.
13. Additional construction expected to take approximately one week.
14. Commissioning is expected to restart after construction is completed.
15. The original 90-day commissioning limit ends on April 23, 2024

15. When and how did you first become aware that you would not be in compliance with the rule(s) and/or permit condition(s)? Provide specific event(s) and date(s) of occurrence(s).

BWP first became aware on February 16, 2024, when Umicore provided a catalyst lab test report with a recommendation to add additional volume of SCR catalyst and a manufacturing timeline for the new catalyst.

16. List date(s) and action(s) you have taken since that time to achieve compliance.

Please refer to BWP's response on question 14.

BWP has been working closely with Umicore and FERCo to identify a solution to the catalyst performance issues since January 24, 2024. BWP immediately provided approval to Umicore to start manufacturing the catalyst to avoid any further delays.

17. What would be the harm to your business during **and/or after** the period of the variance if the variance were not granted?

Economic losses: See discussion below.

Number of employees laid off (if any): _____

Provide detailed information regarding economic losses, if any, (anticipated business closure, breach of contracts, hardship on customers, layoffs, and/or similar impacts).

If the variance is not granted, then BWP will not be able to complete the commissioning process and therefore, will not be able to operate the Lake 1 unit. Commissioning is necessary to balance the new ammonia injection system to be able to reduce NOx emissions, while minimizing ammonia slip, in order to meet the SCAQMD Rule 1135 requirements.

If BWP is not able to complete the commissioning process, the Lake 1 unit will not be able to operate in compliance with Rule 1135 and will remain unavailable for generation severely impacting the reliability of Burbank's electrical system during peak load days (or when distribution work requires additional internal generation production) and will not be able to help integrate intermittent renewable energy in our portfolio such as Copper Mountain Solar. It is estimated that the Lake 1 unit saves BWP approximately \$1.056 million on an average year by avoiding super peak power prices by producing power rather than buying market power, which benefits the customers. Further, if the Lake 1 unit is not available, BWP is at risk of not being able to meet peak energy needs, therefore threatening public health and safety. During peak summer it is entirely possible that there can be no power available to purchase at any cost.

18. Can you curtail or terminate operations in lieu of, or in addition to, obtaining a variance? Please explain.

Due to the upcoming high summer electric load demand, the curtailment of Lake 1 is not an option. Lake 1 is a peaker unit that needs to be available upon request to serve customer load. In addition, curtailment does not obviate the need for a variance, because the unit needs to be online to during the commissioning operation.

19. Estimate excess emissions, if any, on a daily basis, including, if applicable, excess opacity (the percentage of total opacity above 20% during the variance period). If the variance will result in no excess emissions, insert "N/A" here and skip to No. 20.

Pollutant	(A)	(B)	(C)*
	Total Estimated Excess Emissions (lbs/day)	Reduction Due to Mitigation (lbs/day)	Net Emissions After Mitigation (lbs/day)

* Column A minus Column B = Column C

Excess Opacity: _____ %

20. Show calculations used to estimate quantities in No. 19, or explain why there will be no excess emissions.

No excess emissions are expected from the commissioning period. Permit conditions A99.8 and A195.6 already establish fuel use, operating time, and mass emission limits. These limits are not expected to be exceeded and BWP plans to minimize the amount of time of the commissioning period to a feasible extent.

21. Explain how you plan to reduce (mitigate) excess emissions during the variance period to the maximum extent feasible, or why reductions are not feasible.

No excess emissions are expected from restarting the commissioning period. Permit conditions A99.8 and A195.6 already establish fuel use, operating time, and mass emission limits. The period of time needed to complete the commissioning operation will be reduced to the maximum feasible extent and still meet the requirements of all the tests.

22. How do you plan to monitor or quantify emission levels from the equipment or activity(s) during the variance period, and to make such records available to the District? **Any proposed monitoring does not relieve RECLAIM facilities from applicable missing data requirements.**

NOx emissions from the Lake 1 turbine will be monitored via CEMS, which is installed at the Lake 1 Unit.

23. How do you intend to achieve compliance with the rule(s) and/or permit condition(s)? Include a detailed description of any equipment to be installed, modifications or process changes to be made, permit conditions to be amended, etc., dates by which the actions will be completed, and an estimate of total costs.

BWP proposes to achieve compliance with Rule 1135 by performing the required commissioning on the Lake 1 unit as soon as possible after the additional catalyst is installed and commissioning operation is completed.

24. State the date you are requesting the variance to begin: April 23, 2024; and the date by which you expect to achieve final compliance: July 22, 2024 (90 days)

If the regular variance is to extend beyond one year, you **must** include a **Schedule of Increments of Progress**, specifying dates or time increments for steps needed to achieve compliance. See District Rule 102 for definition of Increments of Progress (see Attachment A, Item 24, Example #3).

List Increments of Progress here: N/A

25. List the names of any District personnel with whom facility representatives have had contact concerning this variance petition or any related Notice of Violation or Notice to Comply.

Chris Perri, Facility Permit Engineer Ext. 2696

If the petition was completed by someone other than the petitioner, please provide their name and title below.

Name	Company	Title
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The undersigned, under penalty of perjury, states that the above petition, including attachments and the items therein set forth, is true and correct.

Executed on March 7, 2024 at Burbank, California

Frank Messineo
Signature

Frank Messineo
Print Name

Title: Power Production Superintendent

FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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]

[Devices subject to this condition : D50]

A99.6 The 5 PPM NOX emission limit(s) shall not apply during startups and shutdowns and/or when the boiler exhaust prior to the SCR catalyst is less than 500 degrees F.

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D16, D17]

A99.8 The 5 PPM NOX emission limit(s) shall not apply during startup, shutdown, SCR commissioning, or tuning. The limit is averaged over 1 hour at 15 percent oxygen, dry.

FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Startup shall not exceed 1 hr/event and shutdown shall not exceed 15 minutes/event. The number of startups and shutdowns shall not exceed 2 per day, 60 per month, and 365 in any one calendar year. The normal operating hours of the turbine shall not exceed 17 hours on days when there are 2 start ups.

Tuning shall not exceed 5 hours per day and 10 hours per year. The normal operating hours of the turbine shall not exceed 2 hours on days when tuning is performed. Tuning shall be defined as optimizing and re-balancing the ammonia grid or catalyst modules and re-tuning and testing the NOx emissions from the turbine. During the tuning operation, CO and SCR catalysts shall be operational and water and ammonia injection shall be "ON"

During the 60 minutes which includes a start up, NOx emissions shall not exceed 18.64 lbs. During the 60 minutes which includes a shutdown, NOx emissions shall not exceed 11.18 lbs. During tuning, NOx emissions shall not exceed 24.21 lbs/hr

The 5 PPM NOx limit shall apply at all other operating times.

SCR commissioning is a one-time event upon installation of the Umicore control system. The SCR commissioning shall not exceed 80 turbine operating hours and 23750 mmbtu of fuel use. Once started, the commissioning shall be completed within 90 consecutive days. The NOx emissions during the commissioning event shall not exceed 41 lbs/hr and 1606 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 the commissioning, 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 commissioning operation and at the conclusion of the commissioning operation.

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D50]

FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

A195.6 The 2.5 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry. The limit shall not apply during startup, shutdown, tuning or SCR commissioning.

FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Startup shall not exceed 30 minutes per event except as noted below & shutdown shall not exceed 15 minutes per event. The number of startups and shutdowns each shall not exceed: 2 per day, 60 per month, and 365 in any one calendar year. The normal operating hours of the turbine shall not exceed 17 hours on days when there are 2 start ups.

Tuning shall not exceed 5 hours per day and 10 hours per year. The normal operating hours of the turbine shall not exceed 2 hours on days when tuning is performed. Tuning shall be defined as optimizing and re-balancing the ammonia delivery system or catalyst modules and re-tuning and testing the NOx emissions from the turbine. During the tuning operation, CO and SCR catalysts shall be operational and water and ammonia injection shall be "ON".

During the 60 minutes which includes a start up, NOx emissions shall not exceed 15.97 lbs. During the 60 minutes which includes a shutdown, NOx emissions shall not exceed 7.49 lbs. During tuning, NOx emissions shall not exceed 24.21 lbs/hr. The operator shall use the CEMS minute data to calculate the emissions during start up, shutdown, and tuning.

The 2.5 ppm NOx limit shall apply at all other operating times.

The 2.5 ppm NOx limit takes effect after installation of the Umicore SCR+CO catalyst and upon successful completion of the emissions testing required under condition D29.8, or January 1, 2024 (or other date as specified in the latest approved version of Rule 1135), whichever is sooner. Until the 2.5 ppm NOx limit takes effect, the previous limit of 5.0 ppm NOx as specified in Section D and condition A195.6 of this permit, remains in effect.

SCR commissioning is a one-time event upon installation of the Umicore control system. The SCR commissioning shall not exceed 80 turbine operating hours and 23750 mmbtu of fuel use. Once started, the commissioning shall be completed within 90 consecutive days. The NOx emissions during the commissioning event shall not exceed 41 lbs/hr and 1606 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

FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

the commissioning, 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 commissioning operation and at the conclusion of the commissioning operation.

Extended Start Up Duration Allowance:

Up to 10 start ups per calendar year may exceed the 30 minute duration. These extended start up events shall not exceed 60 minutes. The NO_x emissions during these extended start up events shall not exceed 18.64 lbs. The CO emissions during these extended start up events shall not exceed 9.95 lbs.

All extended start up duration events shall be recorded in the plant's operating log within 24 hours of the event, and in the CEMS by 5 p.m. the next business day following the event. The notations in the log and CEMS must include the plant operating conditions during the extended start up event, including mean catalyst inlet temperature on a minute basis, ammonia flow rate on a minute basis, turbine output on a minute basis, start up duration, and NO_x and CO emissions during the start up.

Exceeding the start up duration of 30 minutes as a result of operator neglect, improper operation or maintenance, or qualified breakdown under Rule 2004(i) does not fall under this extended start up duration allowance.

The purpose of the extended start up duration allowance is to allow the facility time to become familiar with the operation of the new Umicore SCR+CO catalyst system.

The continued need for this extended start up duration allowance may be re-evaluated by the Executive Officer during, or before, the time the final permit to operate for the Umicore catalyst is under review.

Notwithstanding this provision, if the turbine experiences 5 or more excursions in the first 12 months of operation after the installation of the Umicore catalyst, the operator has the option to submit an application to request a re-evaluation of the start up duration limit at that time. Submittal of this application does not preclude the continued operation of the turbine under the terms and conditions of this

FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER

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

permit while the South Coast AQMD performs its evaluation.

[RULE 1135, 1-7-2022; **RULE 2005, 12-4-2015**; RULE 2005, 11-5-2021; **RULE 204, 10-8-1993**]

[Devices subject to this condition : D50]

A195.7 The 6.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry. The limit shall not apply during startup, shutdown or tuning.

FACILITY PERMIT TO OPERATE BURBANK CITY, BURBANK WATER & POWER

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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 1: EXTERNAL COMBUSTION, POWER GENERATION					
System 1: BOILERS					
BOILER, OLIVE NO. 1, NATURAL GAS, RILEY STOKER, WITH LOW NOX BURNER, 551.84 MMBTU/HR WITH A/N: 570666 BURNER, NATURAL GAS, AUS, MODEL DFL-815, SIX BURNERS, WITH LOW NOX BURNER, 551.84 MMBTU/HR GENERATOR, 44 MW	D17	C58	NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 5 PPMV NATURAL GAS (5) [RULE 2009, 1-7-2005]; NOX: 148.67 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]	A99.1, A99.6, A195.4, E193.3
SELECTIVE CATALYTIC REDUCTION, HALDOR TOPSOE A/S, 719.11 CU.FT.; WIDTH: 24 FT ; HEIGHT: 7 FT 10 IN; LENGTH: 4 FT 10 IN A/N: 397663	C58	D17		NH3: 10 PPMV NATURAL GAS (4) [RULE 1303, 12-6-2002; RULE 1303(a)(1)-BACT, 5-10-1996]	A195.5, D12.5, D12.6, D12.7, D29.2, E73.2, E193.3

* (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

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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 1: EXTERNAL COMBUSTION, POWER GENERATION					
BOILER, OLIVE NO. 2, NATURAL GAS, RILEY STOKER, S/N 3454, WITH SIX RILEY GAS BURNERS, 604.7 MMBTU/HR WITH A/N: 570667	D16	C63	NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 5 PPMV NATURAL GAS (4) [RULE 2009, 1-7-2005]; NOX: 148.67 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]	A99.1, A99.6, A195.4, C1.8, E193.3
GENERATOR, 55 MW					
SELECTIVE CATALYTIC REDUCTION, HALDOR TOPSOE A/S, 920.18 CU.FT.; WIDTH: 24 FT 4.5 IN; HEIGHT: 13 FT 3.25 IN; LENGTH: 4 FT 6 IN A/N: 397664	C63	D16		NH3: 10 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	A195.5, D12.5, D12.6, D12.7, D29.2, E73.2, E193.3
Process 2: INTERNAL COMBUSTION, POWER GENERATION					
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 BURBANK CITY, BURBANK WATER & POWER

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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, POWER GENERATION					
GAS TURBINE, LAKE NO. 1, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000 SPRINT, SIMPLE CYCLE, WITH WATER INJECTION, 450 MMBTU/HR WITH A/N: GENERATOR, 46 MW	D50	C52 C53 S55	NOX: MAJOR SOURCE**	CO: 6 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: 5 PPMV (4) [RULE 2005, 5-6-2005]; NOX: 107 PPMV NATURAL GAS (8) [40CFR 60 Subpart GG, 3-6-1981]; PM: 0.01 GRAINS/SCF (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: 11 LBS/HR (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 150 PPMV (8) [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, A99.5, A99.8, A327.1, C1.7, D12.8, D12.10, D29.5, D29.7, D82.1, D82.2, E57.6, K67.6
CO OXIDATION CATALYST, JOHNSON MATTHEY, 96 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 440550	C52	D50			
SELECTIVE CATALYTIC REDUCTION, HALDOR TOPSOE, 805 CU.FT.; WIDTH: 9 FT 3 IN; HEIGHT: 53 FT ; LENGTH: 1 FT 11 IN WITH A/N: 440550 AMMONIA INJECTION, GRID	C53	D50		NH3: 5 PPMV (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.1, D12.5, D12.6, D12.7, D29.5, E73.1

* (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

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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, POWER GENERATION					
STACK, HEIGHT: 80 FT ; DIAMETER: 12 FT A/N:	S55	D50			
System 2: EMERGENCY IC ENGINES					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, DETROIT DIESEL, MODEL 8063-7405, WITH AFTERCOOLER, TURBOCHARGER, 402 HP A/N: 274421	D1		NOX: PROCESS UNIT**	NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]	C1.1, D12.1, E114.1, E116.1, E448.1, K67.1
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, CATERPILLAR, MODEL 3412 DITA, WITH AFTERCOOLER, TURBOCHARGER, 896 BHP WITH A/N: 402827	D57		NOX: PROCESS UNIT**	CO: 8.5 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 6.9 GRAM/BHP-HR DIESEL (4) [RULE 2005, 5-6-2005]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM10: 0.38 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; VOC: 1 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	B61.1, C1.6, D12.9, E162.1, E448.1, K67.1
GENERATOR, 600 KW					
Process 3: MATERIAL STORAGE					
System 1: INORGANIC CHEMICAL STORAGE					

* (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

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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: MATERIAL STORAGE					
STORAGE TANK, PRESSURIZED, AQUEOUS AMMONIA 19 %, WITH VAPOR LOCK BALANCE RECOVERY SYSTEM, 12000 GALS; DIAMETER: 10 FT 6 IN; LENGTH: 40 FT A/N: 392169	D56				C157.1, E193.1
Process 7: R219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL, UNHEATED, NON-CONVEYORIZED	E46			ROG: (9) [RULE 1171, 2-1-2008; RULE 1171, 5-1-2009]	H23.2
RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, <= 53 FT3, WITH DUST FILTER	E47			PM: (9) [RULE 1140, 2-1-1980; RULE 1140, 8-2-1985; RULE 404 2-7-1986; RULE 405, 2-7-1986]	D322.2, D381.1, K67.4
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E48			ROG: (9) [RULE 1113, 2-5-2016; RULE 1171, 2-1-2008; RULE 1171, 5-1-2009]	K67.5
RULE 219 EXEMPT EQUIPMENT, COOLING TOWERS	E49				H23.3

* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
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** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.