

# South Coast Air Quality Management District

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

June 14, 2012

Mr. Manny Robledo  
Electric Operations Manager  
Canyon Power Plant  
201 S. Anaheim Blvd., MS-802  
Anaheim, CA 92805

**SUBJECT:** RECLAIM/Title V Facility Permit Revision (Facility ID: 153992)

Dear Mr. Robledo:

Please find attached the revised Title Page, Table of Contents, Section A and Section H of your RECLAIM/Title V Facility Permit. The revised sections reflect the approval of the permit revision requested in your Application No. 532777 to update the responsible official and Application No. 531827 for change of permit conditions. The proposed permit revision in Application No. 531827 was submitted to EPA for 45-day review on April 24, 2012. This permit revision includes change of permit conditions for the following equipment:

Equipment	Application No.	Device No.	Process	Permit Type
Turbine No. 1	531829	D1	1/1	PC
Turbine No. 2	531831	D7	1/1	PC
Turbine No. 3	531832	D13	1/1	PC
Turbine No. 4	531833	D19	1/1	PC

Please review the attached sections carefully. Insert the enclosed sections into your RECLAIM/Title V Facility Permit and discard the earlier versions. Questions concerning changes to your permit should be directed to Ms. Vicky Lee at (909) 396-2284.

Sincerely,



Brian L. Yeh  
Senior Engineering Manager  
Mechanical, Chemical & Public Services

BLY:AYL:JTY:VL

Attachment

cc: Gerardo Rios, EPA Region IX  
Ed Pupka, AQMD Compliance

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## FACILITY PERMIT TO OPERATE

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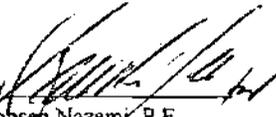
**CANYON POWER PLANT  
3071 E MIRALOMA AVE  
ANAHEIM, CA 92806**

### 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, ORDENANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

By   
Monson Nazemi, P.E.  
Deputy Executive Officer  
Engineering & Compliance

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**FACILITY PERMIT TO OPERATE  
CANYON POWER PLANT**

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**FACILITY PERMIT TO OPERATE  
CANYON POWER PLANT**

**SECTION A: FACILITY INFORMATION**

**LEGAL OWNER &/OR OPERATOR:** CANYON POWER PLANT

**LEGAL OPERATOR (if different than owner):**

**EQUIPMENT LOCATION:** 3071 E MIRALOMA AVE  
ANAHEIM, CA 92806-1809

**MAILING ADDRESS:** 201 S ANAHEIM BLVD SUITE 802  
ANAHEIM, CA 92805-3821

**RESPONSIBLE OFFICIAL:** MANNY ROBLEDO

**TITLE:** ELECTRIC OPERATIONS MANAGER

**TELEPHONE NUMBER:** (714) 765-5107

**CONTACT PERSON:** CHARLES BYROM

**TITLE:** GENERATION PLANT MANAGER

**TELEPHONE NUMBER:** (714) 765-4536

**INITIAL TITLE V PERMIT ISSUED:** March 23, 2010

**TITLE V PERMIT EXPIRATION DATE:** March 22, 2015

TITLE V		RECLAIM	
YES	NOx:	YES	
	SOx:	NO	
	CYCLE:	1	
	ZONE:	COASTAL	

**FACILITY PERMIT TO OPERATE  
 CANYON POWER PLANT**

**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
<b>Process 1: POWER GENERATION</b>					
<b>System 1: GAS TURBINE</b>					

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

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<b>Process 1: POWER GENERATION</b>					
GAS TURBINE, NO 1, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000PC SPRINT, SIMPLE CYCLE, 479 MMBTU/HR AT 46 DEG F, WITH INLET CHILLING, WITH WATER INJECTION WITH A/N: 531829 Permit to Construct Issued: 06/14/12	D1	C3	NOX: MAJOR SOURCE**	CO: 4 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: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988, RULE 2005, 5-6-2005]; NOX: 11.53 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 25 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 98.16 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM10: 0.01 GRAINS/SCF NATURAL GAS (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]; PM10: 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 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)]	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2, A195.3, A327.1, B61.1, D12.1, D29.1, D29.2, D29.3, D82.1, D82.2, E193.1, H23.1, I296.1, K40.1, K67.1

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<b>Process 1: POWER GENERATION</b>					
GENERATOR, 50.95 MW				-BACT, 12-6-2002]	
CO OXIDATION CATALYST, NO. 1, BASF, 110 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 476654 Permit to Construct Issued: 03/23/10	C3	D1 C4			
SELECTIVE CATALYTIC REDUCTION, NO. 1, CORMETECH CMHT-21, 1012 CU.FT.; WIDTH: 2 FT 6 IN; HEIGHT: 25 FT 9 IN; LENGTH: 18 FT WITH A/N: 476654 Permit to Construct Issued: 03/23/10	C4	C3 S6		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)] -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.4, D12.2, D12.3, D12.4, E179.1, E179.2, E193.1
AMMONIA INJECTION					
STACK, TURBINE NO. 1, HEIGHT: 86 FT ; DIAMETER: 11 FT 8 IN A/N: 531829 Permit to Construct Issued: 06/14/12	S6	C4			

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
  - (3) Denotes RECLAIM concentration limit
  - (5) (5A) (5B) Denotes command and control emission limit
  - (7) Denotes NSR applicability limit
  - (9) See App B for Emission Limits
  - (2) (2A) (2B) Denotes RECLAIM emission rate
  - (4) Denotes BACT emission limit
  - (6) Denotes air toxic control rule limit
  - (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions <sup>*</sup> And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
GAS TURBINE, NO. 2, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000PC SPRINT, SIMPLE CYCLE, 479 MMBTU/HR AT 46 DEG F, WITH INLET CHILLING, WITH WATER INJECTION WITH A/N: 531831 Permit to Construct Issued 06/14/12	D7	C9	NOX: MAJOR SOURCE**	CO: 4 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: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988, RULE 2005, 5-6-2005]; NOX: 11.53 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX 25 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 98.16 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005], PM10: 0.01 GRAINS/SCF NATURAL GAS (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]; PM10: 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 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)	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2, A195.3, A327.1, B61.1, D12.1, D29.1, D29.2, D29.3, D82.1, D82.2, E193.1, H23.1, I296.1, K40.1, K67.1

\* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate  
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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
GENERATOR, 50.95 MW				-BACT, 12-6-2002]	
CO OXIDATION CATALYST, NO. 2, BASF, 110 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 476657 Permit to Construct Issued: 03/23/10	C9	D7 C10			
SELECTIVE CATALYTIC REDUCTION, NO. 2, CORMETECH CMHT-21, 1012 CU.FT., WIDTH: 2 FT 6 IN; HEIGHT: 25 FT 9 IN; LENGTH: 18 FT WITH A/N: 476657 Permit to Construct Issued: 03/23/10	C10	C9 S12		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)] -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.4, D12.2, D12.3, D12.4, E179.1, E179.2, E193.1
AMMONIA INJECTION					
STACK, TURBINE NO 2, HEIGHT: 86 FT; DIAMETER: 11 FT 8 IN A/N: 531831 Permit to Construct Issued: 06/14/12	S12	C10			

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
  - (3) Denotes RECLAIM concentration limit
  - (5) (5A) (5B) Denotes command and control emission limit
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
GAS TURBINE, NO. 3, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000PC SPRINT, SIMPLE CYCLE, 479 MMBTU/HR AT 46 DEG F, WITH INLET CHILLING, WITH WATER INJECTION WITH A/N: 531832 Permit to Construct Issued: 06/14/12	D13	C15	NOX: MAJOR SOURCE**	CO: 4 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: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988, RULE 2005, 5-6-2005]; NOX: 11.53 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 25 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 98.16 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM10: 0.01 GRAINS/SCF NATURAL GAS (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]; PM10: 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 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)]	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2, A195.3, A327.1, B61.1, D12.1, D29.1, D29.2, D29.3, D82.1, D82.2, E193.1, H23.1, I296.1, K40.1, K67.1

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<b>Process 1: POWER GENERATION</b>					
GENERATOR, 50.95 MW				-BACT, 12-6-2002]	
CO OXIDATION CATALYST, NO. 3, BASF, 110 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 476660 Permit to Construct Issued: 03/23/10	C15	D13 C16			
SELECTIVE CATALYTIC REDUCTION, NO. 3, CORMETECH CMHT-21, 1012 CU.FT.; WIDTH: 2 FT 6 IN; HEIGHT: 25 FT 9 IN, LENGTH: 18 FT WITH A/N 476660 Permit to Construct Issued: 03/23/10	C16	C15 S18		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)] -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.4, D12.2, D12.3, D12.4, E179.1, E179.2, E193.1
AMMONIA INJECTION STACK, TURBINE NO. 3, HEIGHT: 86 FT; DIAMETER: 11 FT 8 IN A/N: 531832 Permit to Construct Issued: 06/14/12	S18	C16			

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
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- (5) (5A) (5B) Denotes command and control emission limit
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<b>Process 1: POWER GENERATION</b>					
GAS TURBINE, NO. 4, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000PC SPRINT, SIMPLE CYCLE, 479 MMBTU/HR AT 46 DEG F, WITH INLET CHILLING, WITH WATER INJECTION WITH A/N 531833 Permit to Construct Issued: 06/14/12	D19	C21	NOX: MAJOR SOURCE**	CO: 4 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: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005], NOX 11.53 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 25 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX 98.16 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005], PM10 0.01 GRAINS/SCF NATURAL GAS (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978], PM10 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]; PM10 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2 (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 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)	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2, A195.3, A327.1, B61.1, D12.1, D29.1, D29.2, D29.3, D82.1, D82.2, E193.1, H23.1, I296.1, K40.1, K67.1

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GENERATOR, 50.95 MW				-BACT, 12-6-2002]	
CO OXIDATION CATALYST, NO. 4, BASE, 110 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 476663 Permit to Construct Issued: 03/23/10	C21	D19 C22			
SELECTIVE CATALYTIC REDUCTION, NO. 4, CORMETECH CMHT-2I, 1012 CU.FT.; WIDTH: 2 FT 6 IN; HEIGHT: 25 FT 9 IN, LENGTH: 18 FT WITH A/N: 476663 Permit to Construct Issued: 03/23/10	C22	C21 S24		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)] -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.4, D12.2, D12.3, D12.4, E179.1, E179.2, E193.1
AMMONIA INJECTION STACK, TURBINE NO. 4, HEIGHT: 86 FT ; DIAMETER: 11 FT 8 IN A/N: 531833 Permit to Construct Issued: 06/14/12	S24	C22			
<b>System 2: INTERNAL COMBUSTION ENGINE</b>					

- \* (1) (1A) (1B) Denotes RECLAIM emission factor
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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
<b>Process 1: POWER GENERATION</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, CATERPILLAR, MODEL C-27, WITH AFTERCOOLER, TURBOCHARGER, 1141 BHP WITH A/N: 476666 Permit to Construct Issued: 03/23/10	D25		NOX: PROCESS UNIT**	CO: 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; NOX 225.48 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX + ROG: 4.8 GRAM/BHP-HR DIESEL (4) [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; RULE 2005, 5-6-2005]; PM10: 0.15 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]; SOX 0.005 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	C1.1, D12.5, E193.1, E193.2, E193.3, 1296.2, K67.2, K67.3
FILTER, DIESEL PARTICULATES, CLEANAIR SYSTEMS PERMIT, MODEL FDA225, WITH HIBACK DATA LOGGING AND ALARM SYSTEM					
GENERATOR, 750 KW					
<b>System 3: INORGANIC CHEMICAL STORAGE</b>					

\* (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  
 CANYON POWER PLANT**

**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
<b>Process 1: POWER GENERATION</b>					
STORAGE TANK, PRESSURE VESSEL, 19 PERCENT AQUEOUS AMMONIA, 10000 GALS; DIAMETER: 7 FT ; LENGTH: 42 FT A/N: 476665 Permit to Construct Issued: 03/23/10	D28				CI57.1, E144.1, E193.1, K67.4
<b>Process 2: OIL WATER SEPARATION</b>					
OIL WATER SEPARATOR, UNDERGROUND, EMULSIFIED OIL AND WATER, 550 GALS; DIAMETER: 3 FT 6 IN; LENGTH: 7 FT 9 IN A/N: 481185 Permit to Construct Issued: 03/23/10	D29				E193.1

\* (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.

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**FACILITY PERMIT TO OPERATE  
CANYON POWER PLANT**

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**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  
CANYON POWER PLANT**

**SECTION H: DEVICE ID INDEX**

Device Index For Section H			
Device ID	Section H Page No.	Process	System
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S6	3	1	1
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C10	5	1	1
S12	5	1	1
D13	7	1	1
C15	7	1	1
C16	7	1	1
S18	7	1	1
D19	9	1	1
C21	9	1	1
C22	9	1	1
S24	9	1	1
D25	10	1	2
D28	11	1	3
D29	11	2	0

## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

### 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 diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

Material safety data sheets for the diesel fuel shall be kept current and made available to District personnel upon request.

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

#### DEVICE CONDITIONS

##### A. Emission Limits

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

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than or equal to 129 LBS IN ANY CALENDAR MONTH
PM10	Less than or equal to 299 LBS IN ANY CALENDAR MONTH
SOX	Less than or equal to 34 LBS IN ANY CALENDAR MONTH

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

For the purposes of this condition, the above emission limits shall be based on the emissions from a single turbine.

The turbine shall not commence with normal operation until the commissioning process has been completed. Normal operation commences when the turbine is able to supply electrical energy to the power grid as required under contract with the relevant entities. The District shall be notified in writing once the commissioning process for each turbine is completed.

Normal operation may commence in the same calendar month as the completion of the commissioning process provided the turbine is in compliance with the above emission limits.

The operator shall calculate the monthly emissions for VOC, PM10, and SO<sub>x</sub> using the equation below.

Monthly Emissions, lb/month = (Monthly fuel usage in mmscf/month) \*  
(Emission factors listed below)

For commissioning, the emission factors shall be as follows: VOC, 3.76 lb/mmcf; PM10, 6.03 lb/mmcf; and SO<sub>x</sub>, 0.68 lb/mmcf.

For normal operation, the emission factors shall be as follows: VOC, 2.59 lb/mmcf; PM10, 6.03 lb/mmcf; and SO<sub>x</sub>, 0.68 lb/mmcf.

For a month during which both commissioning and normal operation take place, the monthly emissions shall be the total of the commissioning emissions and the normal operation emissions.

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

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

[Devices subject to this condition : D1, D7, D13, D19]

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

A99.1 The 2.5 PPM NOX emission limit(s) shall not apply during turbine commissioning, start-up, and shutdown periods. Commissioning shall not exceed 156 hours total. Each start-up shall not exceed 35 minutes. Each shutdown shall not exceed 10 minutes. The turbines shall be limited to a maximum of 240 start-ups per year.

NOx emissions for an hour that includes a start-up shall not exceed 14.27 lbs, and for an hour that includes a shutdown 4.07 lbs. For the purpose of defining an hour that includes a start-up, the period begins when natural gas is first introduced into the turbine and ends after 60 minutes. The worst case includes a full start-up sequence of 35 minutes, followed immediately by a turbine trip, a five minute purge period during which no fuel is burned, and the first 20 minutes of a restart sequence.

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

For the purposes of this condition, start-up shall be defined as the start-up process to bring the turbine to full successful operation.

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

[Devices subject to this condition : D1, D7, D13, D19]

A99.2 The 4.0 PPM CO emission limit(s) shall not apply during turbine commissioning, start-up, and shutdown periods. Commissioning shall not exceed 156 hours total. Each start-up shall not exceed 35 minutes. Each shutdown shall not exceed 10 minutes. The turbine shall be limited to a maximum of 240 start-ups per year.

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

CO emissions for an hour that includes a start-up shall not exceed 11.6 lbs, and for an hour that includes a shutdown 4.15 lbs. For the purpose of defining an hour that includes a start-up, the period begins when natural gas is first introduced into the turbine and ends after 60 minutes. The worst case includes a full start-up sequence of 35 minutes, followed immediately by a turbine trip, a five minute purge period during which no fuel is burned, and the first 20 minutes of a restart sequence.

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

For the purposes of this condition, start-up shall be defined as the start-up process to bring the turbine to full successful operation.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D1, D7, D13, D19]

- A99.3 The 2.0 PPM ROG emission limit(s) shall not apply during turbine commissioning, start-up, and shutdown periods. Commissioning shall not exceed 156 hours total. Each start-up shall not exceed 35 minutes. Each shutdown shall not exceed 10 minutes. The turbine shall be limited to a maximum of 240 start-ups per year.

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

ROG emissions for an hour that includes a start-up shall not exceed 1.29 lbs, and for an hour that includes a shutdown 1.27 lbs. For the purpose of defining an hour that includes a start-up, the period begins when natural gas is first introduced into the turbine and ends after 60 minutes. The worst case includes a full start-up sequence of 35 minutes, followed immediately by a turbine trip, a five minute purge period during which no fuel is burned, and the first 20 minutes of a restart sequence.

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

For the purposes of this condition, start-up shall be defined as the start-up process to bring the turbine to full successful operation.

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

[Devices subject to this condition : D1, D7, D13, D19]

A99.4 The 98.16 LBS/MMCF NOX emission limit(s) shall only apply during turbine commissioning during the interim reporting period to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from entry into RECLAIM.

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

[Devices subject to this condition : D1, D7, D13, D19]

A99.5 The 11.53 LBS/MMCF NOX emission limit(s) shall only apply after turbine commissioning during the interim reporting period to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from entry into RECLAIM.

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

[Devices subject to this condition : D1, D7, D13, D19]

A195.1 The 2.5 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O<sub>2</sub>, dry.

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**FACILITY PERMIT TO OPERATE  
CANYON POWER PLANT**

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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 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D1, D7, D13, D19]

A195.2 The 4.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O<sub>2</sub>, dry.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D1, D7, D13, D19]

A195.3 The 2.0 PPMV ROG emission limit(s) is averaged over 60 minutes at 15 percent O<sub>2</sub>, dry.

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

[Devices subject to this condition : D1, D7, D13, D19]

A195.4 The 5 PPMV NH<sub>3</sub> emission limit(s) is averaged over 60 minutes at 15% O<sub>2</sub>, dry basis. The operator shall calculate and continuously record the NH<sub>3</sub> slip concentration using the following equation.

## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

$NH_3$  (ppmv) =  $[a-b*c/1E+06]*1E+06/b$ ; where

a =  $NH_3$  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  $NO_x$  across the SCR (ppmvd at 15%  $O_2$ )

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

The  $NO_x$  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 : C4, C10, C16, C22]

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 : D1, D7, D13, D19]

#### B. Material/Fuel Type Limits

B61.1 The operator shall not use natural gas containing the following specified compounds:

## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Compound	Range	grain per 100 scf
H2S	greater than	0.25

This concentration limit is an annual average based on monthly samples of natural gas composition or gas supplier documentation. Gaseous fuel samples shall be tested using District Method 307-91 for total sulfur calculated as H2S.

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

[Devices subject to this condition : D1, D7, D13, D19]

#### C. Throughput or Operating Parameter Limits

C1.1 The operator shall limit the operating time to no more than 200 hour(s) in any one year.

The 200 hours in any one year shall include no more than 50 hours for maintenance and performance testing.

The duration of each test shall not exceed 38 minutes in any one hour.

[RULE 1110.2, 2-1-2008; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1401, 3-7-2008; RULE 1470, 6-1-2007; RULE 2012, 5-6-2005; CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D25]

C157.1 The operator shall install and maintain a pressure relief valve set at 25 psig.

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

[Devices subject to this condition : D28]

#### D. Monitoring/Testing Requirements

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

D12.1 The operator shall install and maintain a(n) flow meter to accurately indicate the fuel usage being supplied to the turbine.

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

**[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 : D1, D7, D13, D19]

D12.2 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 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 calibration records shall be kept on site and made available to District personnel upon request.

The ammonia injection system shall be placed in full operation as soon as the minimum temperature at the outlet to the SCR reactor is reached. The minimum temperature is 540 deg F.

The ammonia injection rate shall remain between 6.83 gal/hr and 16 gal/hr.

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

[Devices subject to this condition : C4, C10, C16, C22]

D12.3 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.

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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 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 catalyst temperature range shall remain between 665 deg F and 870 deg F.

The catalyst inlet temperature shall not exceed 870 deg F.

The temperature range requirement of this condition shall not apply during start-up conditions of the turbine not to exceed 35 minutes per start-up. For this condition, start-up shall be defined as the start-up process to bring the turbine to full successful operation.

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

[Devices subject to this condition : C4, C10, C16, C22]

- D12.4 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 pressure drop across the catalyst shall not exceed 6 inches water column.

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

[Devices subject to this condition : C4, C10, C16, C22]

- D12.5 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

**FACILITY PERMIT TO OPERATE  
 CANYON POWER PLANT**

**SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

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

[RULE 1110.2, 2-1-2008; **RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)  
 -Offset, 12-6-2002; RULE 1401, 3-7-2008; RULE 1470, 6-1-2007; **RULE 2012,**  
**5-6-2005]**

[Devices subject to this condition : D25]

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
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	District Method 5	4 hours	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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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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 in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 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.

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, and the turbine generating output in MW.

The test shall be conducted when this equipment is operating at loads of 100, 75, and 50 percent, with the exception of PM10 testing. For PM10, the test shall be conducted when this equipment is operating at a load of 100 percent.

For natural gas fired turbines only, VOC compliance shall be demonstrated as follows: a) Stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of canisters are done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) Analysis of canisters are per EPA Method TO-12 (with preconcentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F.

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than 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 VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines.

Because the VOC BACT level was set using data derived from various source test results, this alternate VOC compliance method proves a fair comparison and

**FACILITY PERMIT TO OPERATE  
CANYON POWER PLANT**

**SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

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

represents the best sampling and analysis technique for this purpose at this time. The test results shall be reported with two significant digits.

For the purpose of this condition, alternative test method may be allowed for each of the above pollutants upon concurrence of AQMD, EPA and CARB.

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

[Devices subject to this condition : D1, D7, D13, D19]

D29.2 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

## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The test(s) shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

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

The NO<sub>x</sub> 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<sub>x</sub> emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted and the results submitted to the District within 60 days after the test date.

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

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

[Devices subject to this condition : D1, D7, D13, D19]

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	Not Applicable	Fuel sample
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District Method 5	4 hours	Outlet of the SCR serving this equipment

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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 at least once every three years. 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, and the turbine generating output in MW.

The test shall be conducted in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 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.

The test shall be conducted when this equipment is operating at loads of 100, 75, and 50 percent, with the exception of PM10 testing. For PM10, the test shall be conducted when this equipment is operating at a load of 100 percent.

For natural gas fired turbines only, VOC compliance shall be demonstrated as follows: a) Stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of canisters are done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) Analysis of canisters are per EPA Method TO-12 (with preconcentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F.

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than 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 VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines.

Because the VOC BACT level was set using data derived from various source test results, this alternate VOC compliance method provides a fair comparison and represents the best sampling and analysis technique for this purposes at this time.

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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 results shall be reported with two significant digits.

For the purposes of this condition, alternative test method may be allowed for each of the above pollutants upon concurrence of AQMD, EPA, and CARB.

The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit.

[**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]**

[Devices subject to this condition : D1, D7, D13, D19]

D82.1 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv

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

The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine, 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 shall be installed and operated to measure CO concentrations over a 15 minute averaging time period.

[**RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 218, 8-7-1981; RULE 218, 5-14-1999]**

[Devices subject to this condition : D1, D7, D13, D19]

D82.2 The operator shall install and maintain a CEMS to measure the following parameters:

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

NOX concentration in ppmv

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

The CEMS shall be installed and operating no later than 90 days after initial start-up of the turbine and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within two weeks of the turbine start-up date, the operator shall provide written notification to the District of the exact date of start-up.

The CEMS shall be installed and operating (for BACT purposes only) no later than 90 days after initial start-up of the turbine.

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

[Devices subject to this condition : D1, D7, D13, D19]

#### **E. Equipment Operation/Construction Requirements**

E144.1 The operator shall vent this equipment, during filling, only to the vessel from which it is being filled.

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

[Devices subject to this condition : D28]

E179.1 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- 2

Condition Number D 12- 3

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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

[Devices subject to this condition : C4, C10, C16, C22]

- E179.2 For the purpose of the following condition number(s), continuously record shall be defined as measuring at least once every month and shall be calculated based upon the average of the continuous monitoring for that month.

Condition Number D 12- 4

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

[Devices subject to this condition : C4, C10, C16, C22]

- E193.1 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In accordance with all air quality mitigation measures stipulated in the final California Energy Commission decision for the 07-AFC-9 project.

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D1, C4, D7, C10, D13, C16, D19, C22, D25, D28, D29]

- E193.2 The operator shall operate and maintain this equipment according to the following requirements:

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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 operation of this engine beyond the 50 hours per year allotted for maintenance and performance testing shall be allowed only in the event of a loss of grid power or up to 30 minutes prior to a rotating outage, provided that the utility distribution company has ordered rotating outages in the control area where the engine is located or has indicated that it expects to issue such an order at a certain time, and the engine is located in a utility service block that is subject to the rotating outage.

Engine operation shall be terminated immediately after the utility distribution company advises that a rotating outage is no longer imminent or in effect.

The engine shall be operated for the primary purpose of providing a back up source of power to start a turbine.

[RULE 1110.2, 2-1-2008; 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 1401, 3-7-2008; RULE 1470, 6-1-2007; RULE 2012, 5-6-2005]

[Devices subject to this condition : D25]

E193.3 The operator shall operate and maintain this equipment according to the following specifications:

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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 operator shall operate the diesel particulate filter system only with an operational HiBACK data logging and alarm system with backpressure and temperature monitors.

The HiBACK data logging and alarm system shall be programmed to provide a red warning signal and an audible alarm, whenever the engine backpressure reaches the maximum allowable backpressure of 40 inches of water. The engine backpressure shall not exceed 40 inches of water in operation.

The engine shall be operated at the load level required to achieve an engine exhaust gas temperature of 572 deg F (300 deg C) for passive regeneration of the diesel particulate filter for at least 30% of the operating time.

The engine shall not be operated below the passive regeneration temperature of 572 deg F for more than 240 consecutive minutes.

The operator shall regenerate the diesel particulate filter after every 12 cold starts or whenever a yellow warning signal indicating the backpressure is 10% below the allowable backpressure of 40 inches of water is received from the HiBACK alarm system, whichever occurs first. Filter regeneration is complete when the backpressure monitoring system indicates a normal backpressure reading.

The engine shall be shut down and the diesel particulate filter shall be cleaned whenever the backpressure reaches the maximum backpressure limit of 40 inches water. Cleaning shall be performed according to the manufacturer's recommendations in the installation and maintenance manual.

After every 200 hours of normal engine operation, the operator shall inspect the integrity of the diesel particulate filter and, if necessary, replace it.

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

[Devices subject to this condition : D25]

#### H. Applicable Rules

**FACILITY PERMIT TO OPERATE  
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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:**

H23.1 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]

[Devices subject to this condition : D1, D7, D13, D19]

**I. Administrative**

I296.1 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the annual emissions increase for the first 12 months 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 sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall prior to the 1st compliance year hold a minimum NOx RTCs of 9677 lbs/yr. This condition shall apply during the 1st 12 months of operation, commencing with the initial operation of the gas turbine.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the 1st compliance year, hold a minimum of 6886 lbs/yr of NOx RTCs for the operation of the gas turbine.

In accordance with Rule 2005(f), unused RTCs may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the 1st compliance year.

The condition shall apply to each turbine individually.

[RULE 2005, 5-6-2005]

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

[Devices subject to this condition : D1, D7, D13, D19]

- 1296.2 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the annual emissions increase for the first 12 months 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 sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall prior to the 1st compliance year hold a minimum NOx RTCs of 2412 lbs/yr. This condition shall apply during the 1st 12 months of operation, commencing with the initial operation of the black start engine.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the 1st compliance year, hold a minimum of 2412 lbs/yr of NOx RTCs for operation of the black start engine.

In accordance with Rule 2005(f), unused RTCs may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the 1st compliance year.

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

[Devices subject to this condition : D25]

#### **K. Record Keeping/Reporting**

- K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

Source test results shall be submitted to the District 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 (lb/hr), and lb/MMCF. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains/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 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, 5-6-2005**]

[Devices subject to this condition : D1, D7, D13, D19]

K67.1 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.

Natural gas fuel use after the commissioning period and prior to CEMS certification.

Natural gas fuel use after CEMS certification.

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

[Devices subject to this condition : D1, D7, D13, D19]

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## FACILITY PERMIT TO OPERATE CANYON POWER PLANT

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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:**

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

An engine operating log shall be maintained which on a monthly basis shall list all engine operations in each of the following areas:

- A. Emergency use hours of operation,
- B. Maintenance and testing hours, and
- C. Other operating hours, with a description of the reason for operation.

In addition, each time the engine is started manually, the log shall include the date of operation and the timer readings in hours at the beginning and end of operation. The log shall be kept for a minimum of five calendar years prior to the current year and made available to District personnel upon request. The total hours of operation for the previous calendar year shall be recorded some time during the first 15 days of January each year.

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D25]

K67.3 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

The operator shall maintain records of diesel particulate filter inspections, replacements, and cleaning.

The operator shall maintain monthly records of the exhaust temperature, engine backpressure, and date and time for the duty cycle as downloaded from the HiBACK data logging and alarm system.

All records shall be maintained on file for a minimum of five years and made available to District personnel upon request.

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

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**FACILITY PERMIT TO OPERATE  
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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:**

[Devices subject to this condition : D25]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

The operator shall document an inspection each time the tank is filled to ensure the vapor recovery equipment is consistently and properly used.

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

[Devices subject to this condition : D28]