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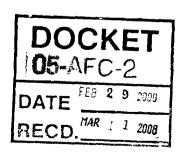
 Date:
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# FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL CON	<b>ABUSTI</b>	ON			
System 1 : GAS TURBINES.	. POWE	R GENERAT	TON		
GAS TURBINE, UNIT NO.1, NATURAL GAS, GENERAL ELECTRIC, MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F, WITH WATER INJECTION WITH A/N:	D1	C3	NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982]; CO: 6 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD- BACT,10-7-1988]	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2, A195.3, A327.1, B61.2, C1.1, C1.4,
				NOX: 123.46 LBS/MMSCF (1) [RULE 2012,5-6-2005]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT,10-7-1988;RULE 2005,5-6-2005]	D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, E193.5, H23.1, I296.1, K40.1, K67.1
				NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK,7-6-2006]; NOX: 10.29 LBS/MMSCF NATURAL GAS (1) [RULE 2012,5-6-2005]	
				NOX: 0.08 LBS/MEGAWATT-HOUR NATURAL GAS (5) [RULE 1309.1,5-3-2002; RULE 1309.1,8- 3-2007]; PM10: 0.01 GRAINS/SCF NATURAL GAS (5) [RULE 475,10-8-1976	



*	(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

<sup>\*</sup> 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 WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL CO	MBUSTI	ON			
				RULE 475,8-7-1978]; PM10: 11 LBS/HR NATURAL GAS (5A) [RULE 475,10-8-1976; RULE 475,8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5B) [RULE 409,8-7-1981]	
				PM10: 0.06 LBS/MEGAWATT-HOUR (5C) [RULE 1309.1,5-3- 2002;RULE 1309.1,8-3-2007]; 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	
	1			RULE 1303(a)(1)-BACT,12-6- 2002	
GENERATOR, 104 MW	' !			; 	
CO OXIDATION CATALYST, NO.1, ENGLEHARD CAMET, WITH 72 CUBIC FEET OF TOTAL CATALYST VOLUME A/N:	C3	D1 C4		· · · · · · · · · · · · · · · ·	

CIVIAVIBIE	Anothe DECI	ΔÎMA	miccion	factor

(3) Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

(7) Denotes NSR applicability limit

See App B for Emission Limits

(2)(2A)(2B) Denotes RECLAIM emission rate

(4) Denotes BACT emission limit

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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## **FACILITY PERMIT TO OPERATE** WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: INTERNAL CO	MBUSTI	ON			
SELECTIVE CATALYTIC REDUCTION, NO. 1, HALDOR-TOPSOE DNX-920, 718 CU.FT.; WIDTH: 20 FT 3 IN; HEIGHT: 28 FT 8 IN; LENGTH: 1 FT 8 IN WITH A/N: AMMONIA INJECTION, GRID	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
STACK, NO.1, HEIGHT: 90 FT; DIAMETER: 13 FT 6 IN A/N:	S6	C4		: : 	
GAS TURBINE, UNIT NO.2, NATURAL GAS, GENERAL ELECTRIC, MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F, WITH WATER INJECTION WITH A/N:	D7	C9	SOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982]; CO: 6 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD- BACT,10-7-1988]	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2 A195.3, A327.1 B61.2, C1.1, C1.4,
				NOX: 123.46 LBS/MMSCF (1) [RULE 2012,5-6-2005]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT,10-7-1988;RULE 2005,5-6-2005]	D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, E193.5, H23.1, I296.1, K40.1, K67.1
				NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK,7-6-2006]; NOX: 10.29 LBS/MMSCF NATURAL GAS (1) [RULE 2012,5-6-2005]	



Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

See App B for Emission Limits

(7) Denotes NSR applicability limit

(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.)

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 WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL CO	OMBUSTI	ON			
		:		NOX: 0.08 LBS/MEGAWATT-HOUR NATURAL GAS (5) [RULE 1309.1,5-3-2002; RULE 1309.1,8- 3-2007]; PM10: 0.01 GRAINS/SCF NATURAL GAS (5) [RULE 475,10-8-1976	
				RULE 475,8-7-1978]; PM10: 11 LBS/HR NATURAL GAS (5A) [RULE 475,10-8-1976; RULE 475,8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5B) [RULE 409,8-7-1981]	
				PM10: 0.06 LBS/MEGAWATT-HOUR (5C) [RULE 1309.1,5-3- 2002; RULE 1309.1,8-3-2007]; 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	
GENERATOR, 104 MW			! ! ! !	RULE 1303(a)(1)-BACT,12-6- 2002]	

*	(1)(1)	A)/IR)I	Jenotes	DECL	$\Delta IM$	emission	factor

(3) Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

See App B for Emission Limits

(7) Denotes NSR applicability limit

(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

<sup>\*\*</sup> Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

Section H Facility 1.D.: Revision #:

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## **FACILITY PERMIT TO OPERATE** WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL CO	MBUSTI	ON			
CO OXIDATION CATALYST, NO.2, ENGLEHARD CAMET, WITH 72 CUBIC FEET OF TOTAL CATALYST VOLUME A/N:	C9	D7 CI0			
SELECTIVE CATALYTIC REDUCTION, NO. 2, HALDOR-TOPSOE DNX-920, 718 CU.FT.; WIDTH: 20 FT 3 IN; HEIGHT: 28 FT 8 IN; LENGTH: 1 FT 8 IN WITH A/N:  AMMONIA INJECTION, GRID	C10 	C9 \$12		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
STACK, NO.2, HEIGHT: 90 FT; DIAMETER: 13 FT 6 IN A/N:	S12	C10			
GAS TURBINE, UNIT NO.3, NATURAL GAS, GENERAL ELECTRIC, MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F, WITH WATER INJECTION WITH A/N:	D13	C15	NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 409,8-7-1981]; CO: 6 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD- BACT,10-7-1988]	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2, A195.3, A327.1, B61.2, C1.1, C1.4,
				NOX: 123.46 LBS/MMSCF (1) [RULE 2012,5-6-2005]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT,10-7-1988;RULE 2005,5-6-2005]	D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, E193.5, H23.1, 1296.1, K40.1, K67.1

(1)(1A)(1B) Denotes RECLAIM emission factor

Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

See App B for Emission Limits

Denotes NSR applicability limit (7)

(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.)

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** WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL (	COMBUSTI	ON			
				NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK,7-6-2006]; NOX: 10.29 LBS/MMSCF NATURAL GAS (1) [RULE 2012,5-6-2005]	
				NOX: 0.08 LBS/MEGAWATT-HOUR NATURAL GAS (5) [RULE 1309.1,5-3-2002; RULE 1309.1,8- 3-2007]; PM10: 0.01 GRAINS/SCF NATURAL GAS (5) [RULE 475,10-8-1976	
				RULE 475,8-7-1978]; PM10: 11 LBS/HR NATURAL GAS (5A) [RULE 475,10-8-1976; RULE 475,8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5B) [RULE 409,8-7-1981]	
				PM10: 0.06 LBS/MEGAWATT-HOUR NATURAL GAS (5C) [RULE 1309.1,5-3-2002; RULE 1309.1,8- 3-2007]; 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	

<b>k</b>	(1)(1A)(1B	) Denotes	RECLAIM	emission	factor
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Denotes RECLAIM concentration limit (3) (5)(5A)(5B) Denotes command and control emission limit

(7) Denotes NSR applicability limit

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.)

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** WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL CO	MBUSTI	ION			
				RULE 1303(a)(1)-BACT,12-6- 2002]	
GENERATOR, 104 MW			:		i
CO OXIDATION CATALYST, NO.3, ENGLEHARD CAMET, WITH 72 CUBIC FEET OF TOTAL CATALYST VOLUME A/N:	C15	D13 C16	:		
SELECTIVE CATALYTIC REDUCTION, NO. 3, HALDOR-TOPSOE DNX-920, 718 CU.FT.; WIDTH: 20 FT 3 IN; HEIGHT: 28 FT 8 IN; LENGTH: 1 FT 8 IN WITH A/N:	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, GRID	 	İ		!	
STACK, NO.3, HEIGHT: 90 FT; DIAMETER: 13 FT 6 IN A/N:	S18	C16			
GAS TURBINE, UNIT NO.4, NATURAL GAS, GENERAL ELECTRIC, MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F, WITH WATER INJECTION WITH A/N:	D19	C21	NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982]; CO: 6 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD- BACT,10-7-1988]	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2, A195.3, A327.1, B61.2, C1.1, C1.4,

(1)(1A)	(1B)	Denotes	RECLAIM	emission	factor
(1)(1)(1)	LD.	Denotes	KECEMIN	CHITZSTOIL	IACLUI

Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

See App B for Emission Limits

(7)

Denotes NSR applicability limit

(2)(2A)(2B) Denotes RECLAIM emission rate

(4) Denotes BACT emission limit

Denotes air toxic control rule limit (6)

(8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)

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 WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: INTERNAL (	COMBUSTI	ON			
				NOX: 10.29 LBS/MMSCF (1A) [RULE 2012,5-6-2005]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT,10-7-1988;RULE 2005,5-6-2005]	D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3 E193.5, H23.1, I296.1, K40.1, K67.1
				NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK,7-6-2006]; NOX: 123.46 LBS/MMSCF (1) [RULE 2012,5-6-2005]; NOX: 0.08 LBS/MEGAWATT-HOUR NATURAL GAS (5) [RULE 1309.1,5-3-2002	
				RULE 1309.1,8-3-2007]; PM10: 0.01 GRAINS/SCF NATURAL GAS (5) [RULE 475,10-8-1976;RULE 475,8-7-1978]; PM10: 11 LBS/HR NATURAL GAS (5A) [RULE 475,10-8-1976	
				RULE 475,8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5B) [RULE 409,8-7-1981]; PM10: 0.06 LBS/MEGAWATT-HOUR NATURAL GAS (5C) [RULE	

(I)(IA)(IR) Denotes	DECI	A Th.	emiccion	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

<sup>\*\*</sup> 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 WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL CO	MBUSTI	ION			
				RULE 1309.1,8-3-2007]; 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)-BACT,12-6-2002]	 
GENERATOR, 104 MW				'. 	!
CO OXIDATION CATALYST, NO.4, ENGLEHARD CAMET, WITH 72 CUBIC FEET OF TOTAL CATALYST VOLUME A/N:	C21	D19 C22		<u>                                     </u>	
SELECTIVE CATALYTIC REDUCTION, NO. 4, HALDOR-TOPSOE DNX-920, 718 CU.FT.; WIDTH: 20 FT 3 IN; HEIGHT: 28 FT 8 IN; LENGTH: 1 FT 8 IN WITH A/N: AMMONIA INJECTION, GRID	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
STACK, NO.4, HEIGHT: 90 FT; DIAMETER: 13 FT 6 IN A/N:	S24	C22			

(1)(1A)(IB) 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

<sup>\*</sup> 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** WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL COM	<b>ABUSTI</b>	ON			
GAS TURBINE, UNIT NO.5, NATURAL GAS, GENERAL ELECTRIC, MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F, WITH WATER INJECTION WITH A/N:	D25	C27	NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 409,8-7-1981]; CO: 6 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD- BACT,10-7-1988]	A63.1, A99.1, A99.2, A99.3, A99.4, A99.5, A195.1, A195.2, A195.3, A327.1, B61.2, C1.1, C1.4,
				NOX: 123.46 LBS/MMSCF (1) [RULE 2012,5-6-2005]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT,10-7-1988; RULE 2005,5-6-2005]	D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, E193.5, H23.1, I296.1, K40.1, K67.1
				NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK,7-6-2006]; NOX: 10.29 LBS/MMSCF NATURAL GAS (1) [RULE 2012,5-6-2005]	
				NOX: 0.08 LBS/MEGAWATT-HOUR NATURAL GAS (5) [RULE 1309.1,5-3-2002; RULE /309.1,8- 3-2007]; PM10: 0.01	
				GRAINS/SCF NATURAL GAS (5) [RULE 475,10-8-1976	

(1)(IA)(IR) Denotes	RECI	ΔIM	emission	factor

Denotes RECLAIM concentration limit (3)

(5)(5A)(5B) Denotes command and control emission limit

Denotes NSR applicability limit (7)

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.)

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 WALNUT CREEK ENERGY PARK

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

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL COM	MBUSTI	ION			
				RULE 475,8-7-1978]; PM10: 11 LBS/HR NATURAL GAS (5A) [RULE 475,10-8-1976; RULE 475,8-7-1978]; PM10: 0.1 GRAINS/SCF NATURAL GAS (5B) [RULE 409,8-7-1981]	
				PM10: 0.06 LBS/MEGAWATT-HOUR (5C) [RULE 1309.1,5-3- 2002; RULE 1309.1,8-3-2007]; 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)-BACT,12-6- 2002]	
GENERATOR, 104 MW					
CO OXIDATION CATALYST, NO.5, ENGLEHARD CAMET, WITH 72 CUBIC FEET OF TOTAL CATALYST VOLUME A/N:	C27	D25 C28			

71371	A)(1R)I	Denotes	RECI	AIM	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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## SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL CO	MBUSTI	ON			
SELECTIVE CATALYTIC REDUCTION, NO. 5, HALDOR-TOPSOE DNX-920, 718 CU.FT.; WIDTH: 20 FT 3 IN; HEIGHT: 28 FT 8 IN; LENGTH: 1 FT 8 IN WITH A/N: AMMONIA INJECTION, GRID	C28	C27 S30		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
STACK, NO.5, HEIGHT: 90 FT; DIAMETER: 13 FT 6 IN A/N:	S30	C28			
System 2 : EMERGENCY F	IRE PU	MP			
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, LEAN BURN, DIESEL FUEL, CLARKE, MODEL JW6H-UF50, WITH AFTERCOOLER, TURBOCHARGER, 340 BHP A/N:	D34		NOX: PROCESS UNIT**	CO: 0.45 GRAM/BHP-HR DIESEL (4) [RULE 1703(a)(2) - PSD-BACT,10-7-1988]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012,5-6-2005]  NOX + ROG: 4.65 GRAM/BHP-HR DIESEL (4) [RULE 1703(a)(2) - PSD- BACT,10-7-1988; RULE 2005,5-6- 2005]; PM10: 0.09 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT,5-10- 1996	B61.1, C1.3, D12.5, D12.6, E193.1, E193.2, I296.2, K67.2

(1)(IA)(IB)De	notes RECL	AIM (	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

<sup>\*\*</sup> 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 WALNUT CREEK ENERGY PARK

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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: INTERNAL CO	MBUSTI	ON			
				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;RULE 1703(a)(2) - PSD- BACT,10-7-1988]	
Process 2 : INORGANIC C	HEMICA.	L STORAGE	2		
STORAGE TANK, FIXED ROOF, TK-1, AMMONIA, 19 PERCENT AQUEOUS AMMONIA, WITH PRV SETTING AT 25 PSIG, 16000 GALS; DIAMETER: 12 FT; HEIGHT: 12 FT A/N:	D31				C157.1, E144.1, E193.1

t	(1)(1A)(	1B) Denotes	RECLAIM	emission	factor
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(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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# FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

**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.

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S18	7	1	
D19	7	1	1
C21	9	1	j
C22	9	1	
S24	9	1	1
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# FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

## 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 3004(a)(4)-Periodic Monitoring, 12-12-1997]

## **DEVICE CONDITIONS**

### A. Emission Limits

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

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

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 2,778 LBS IN ANY ONE MONTH
CO	Less than or equal to 6,532 LBS IN ANY ONE MONTH
SOX	Less than or equal to 281 LBS IN ANY ONE MONTH
VOC	Less than or equal to 887 LBS IN ANY ONE MONTH

The operator shall calculate the monthly emissions for VOC, PM10, and SOx using the equation below and the following emission factors: VOC: 2.00 lb/mmcf; PM10: 6.93 lb/mmcf; and SOx: 0.71 lb/mmcf.

Monthly Emissions, lb/month = X (EF),

Where X = monthly fuel usage, mmscf/month and EF = mission factor indicated above

Compliance with the CO emission limit shall be verified through valid CEMS data

The operator shall calculated the emission limit(s) for the purpose of determining compliance with the monthly CO limit in the absence of valid CEMS data by using the above equation and the following emission factor(s):

- (A) During the commissioning period and prior to CO catalyst installation 125.87 lbs CO mmcf
- (B) After installation of the CO catalyst but prior to CO CEMS certification testing 18.46 lbs CO/mmcf. The emission rate shall be recalculated in accordance with Condition D82.1 if the approved CEMS certification test resulted in emission concentrations higher than 6 ppmv
- (C) After CO CEMS certification testing 18.46 lbs CO/mmcf. After CO CEMS certification test is approved by AQMD, the emissions monitored by the CEMS and calculated in accordance with Condition 82.1 shall be used to calculate emissions

For the purposes of this condition, the limit(s) shall be based on the emissions from a single turbine. During commissioning, the CO emissions shall not exceed 7,441 lbs in any one month. During commissioning, the VOC emissions shall not exceed 904 lbs in any one month.

The operator shall provide the AQMD with written notification of the date of initial CO catalyst use within seven (7) days of the event.

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

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FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

## 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. The commissioning period shall not exceed 134 hours. Start-up time shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 10 minutes for each shutdown. The turbine shall be limited to maximum of 350 start-ups/year. Written records of commissioning, start-ups, and shutdowns shall be maintained and made available upon request from the Executive Officer.

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

[Devices subject to this condition: D1, D7, D13, D19, D25]

A99.2 The 6.0 PPM CO emission limit(s) shall not apply during turbine commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 134 hours. Start-up time shall exceed 60 minutes for each start-up. Shutdown periods shall not exceed 10 minutes for each shutdown. The turbine shall be limited to maximum of 350 start-ups/year. Written records of commissioning, start-ups, and shutdowns shall be maintained and made available upon request from the Executive Officer.

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

[Devices subject to this condition: D1, D7, D13, D19, D25]

A99.3 The 123.46 LBS/MMSCF NOX emission limit(s) shall only apply during the interim reporting period during initial turbine commissioning 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, D25]

A99.4 The 10.86 LBS/MMSCF NOX emission limit(s) shall only apply during the interim reporting period after intial turbine commissioning to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from entry into RECLAIM.

[RULE 2012, 5-6-2005]

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

A99.5 The 2.0 PPM ROG emission limit(s) shall not apply during turbine commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 134 hours. Start-up time shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 10 minutes for each shutdown. The turbine shall be limited to maximum of 350 start-ups/year. Written records of commissioning, start-ups, and shutdowns shall be maintained and made available upon request from the Executive Officer.

[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, D25]

A195.1 The 6.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15% O2, dry.

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

[Devices subject to this condition: D1, D7, D13, D19, D25]

A195.2 The 2.5 PPMV NOX emission limit(s) is averaged over 60 minutes at 15% O2, dry.

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

[Devices subject to this condition: D1, D7, D13, D19, D25]

A195.3 The 2.0 PPMV VOC emission limit(s) is averaged over 60 minutes at 15% O2, dry.

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

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

A195.4 The 5.0 PPMV NH3 emission limit(s) is averaged over 60 minutes at 15% O2, dry basis. The operator shall calculate and continuously record the NH3 slip concentration using the following:.

NH3 (ppmv) = [a-b\*c/1EE+06]\*1EE+06/b; where

a = NH3 injection rate (lb/hr)/17 lb-lb-mol

b = dry exhaust gas flow rate (scf/hr)/385.3 scf/lb-mol

c = change in measured NOx across the SCR (ppmvd at 15% O2)

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

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

The operator shall use the above described method or other 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; RULE 2012, 5-6-2005]

[Devices subject to this condition: C4, C10, C16, C22, C28]

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, D25]

## B. Material/Fuel Type Limits

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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:

B61.1 The operator shall only use diesel fuel containing the following specified compounds:

Compound	Range	ppm by weight
Sulfur	less than or equal to	15

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

[Devices subject to this condition: D34]

B61.2 The operator shall not use natural gas containing the following specified compounds:

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 suppllier documentation. The gaseous fuel sample 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, D25]

## C. Throughput or Operating Parameter Limits

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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:

C1.1 The operator shall limit the fuel usage to no more than 393 MM cubic feet in any one calendar month.

For the purpose of this condition, fuel usage shall be defined as the total natural gas usage of a single turbine.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[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, D25]

C1.3 The operator shall limit the operating time to no more than 199.99 hour(s) in any one year.

For the purpose of this condition, the operating time is inclusive of time allotted for maintenance and testing.

[RULE 1110.2, 6-3-2005; RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 1304(c)-Offset Exemption, 6-14-1996; RULE 2012, 5-6-2005]

[Devices subject to this condition: D34]

C1.4 The operator shall limit the operating time to no more than 4000 hour(s) in any one year.

For the purpose of this condition, one year shall be defined as a period of twelve (12) consecutive months determined on a rolling basis with a new twelve month period beginning on the first day of each calendar month.

[RULE 1309.1, 5-3-2002; RULE 1309.1, 8-3-2007]

[Devices subject to this condition: D1, D7, D13, D19, D25]

C157.1 The operator shall install and maintain a pressure relief valve with a minimum pressure 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: D31]

#### D. Monitoring/Testing Requirements

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

#### 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, D25]

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 ammonia injection rate shall reamin between 13.5 gallons per hour and 16.5 gallons per hour

[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, C28]

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.

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 750 degrees F and 817 degrees F

The catalyst temperature shall not exceed 817 degrees F during the start-up period

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

[Devices subject to this condition: C4, C10, C16, C22, C28]

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

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 remain between 5 inches of water column and 7.6 inches of water column

The pressure drop across the catalyst shall not exceed 7.6 inches of water column during the start-up period.

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

[Devices subject to this condition: C4, C10, C16, C22, C28]

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.

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.

[RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 1304(c)-Offset Exemption, 6-14-1996; RULE 1470, 3-4-2005; RULE 2012, 5-6-2005]

[Devices subject to this condition: D34]

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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:

D12.6 The operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage of the engine.

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.

[RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 1304(c)-Offset Exemption, 6-14-1996; RULE 2012, 5-6-2005]

[Devices subject to this condition: D34]

D12.7 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the turbine.

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

The operator shall monitor and record elapsed time meter readings once on a monthly basis. These records shall be maintained for a period of two years and made available to the Executive Officer upon request.

[RULE 1309.1, 5-3-2002; RULE 1309.1, 8-3-2007]

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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:

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

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

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the mass flow rates in lb/hr, 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 maximum, average, and minimum loads.

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

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 mmHg absolute, b) Pressurization of canisters is 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

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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 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 aanalysis 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 methods may be allowed for each of the above pollutants upon concurrence of AQMD and EPA

[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, D25]

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

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

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

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

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

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

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

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

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

The test shall be conducted n 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 maximum, average, and minimum loads.

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

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 mmHg absolute, b) Pressurization of canisters is 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 aanalysis technique for this purpose at this time. The test results shall be reported with two significant digits

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# FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

## 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, alternative test methods may be allowed for each of the above pollutants uponconcurrence of AQMD and EPA

[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]

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

D29.4 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
PM10 emissions	District Method 5	4 hours	Outlet of the SCR serving this equipment

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 at full load to demonstrate compliance with the 0.080 lb/MWhr NOx and 0.060 lb/MWhr PM10 requirements set forth in Rule 1309.1. If the actual measurement is within the accuracy of the devices used for electrical power measurement, the result will be acceptable.

The lb/MWhr emission rate of each electrical generating unit shall be determined by dividing (a) the lb/hr emission rate measured at the location and in accordance with the test method specified above, by (b) the adjusted gross electrical output of each electrical generating unit.

The adjusted gross electrical output of each electrical generating unit shall be determined by making the following adjustments to the measured gross electrical output:

- 1] Apply the manufacturer's standard correction factors to calculate gross electrical output at ISO conditions.
- 2] Apply the GE site-specific LMS100 power degradation curve to adjust measured gross electrical output, as corrected to ISO conditions, to undegraded electrical generating unit conditions as defined by the turbine manufacturer. The maximum power degradation adjustment shall not exceed 1 percent.

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 electrical generating unit during the test, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

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

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# FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

### 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, D25]

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 operated no later than 90 days after initial start-up of the turbine, and in accordance with 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 initial 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.

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

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

K = 7.267EE-8 (lb/scf)/ppm

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

Fd = 8710 dscf/MMBTU natural gas

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

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

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

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

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

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

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 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, D25]

## 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: D31]

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 based upon the average of the continuous monitoring for that hour.

Condition Number D 12-2

Condition Number D 12-3

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

[Devices subject to this condition: C4, C10, C16, C22, C28]

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

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]

[Devices subject to this condition: C4, C10, C16, C22, C28]

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

In accordance with all mitigation measures stipulated in the final California Energy Commission decision for the 05-AFC-2 project.

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition: D1, C4, D7, C10, D13, C16, D19, C22, D25, C28, D31, D34]

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

This equipment shall only operate if utility electricity is not available

This equipment shall only be operated for the primary purpose of providing a backup source of power to drive an emergency fire pump

This equipment shall only be operated for maintenance and testing, not to exceed 50 hours in any one year

This equipment shall not be operated under a Demand Response Program (DRP)

An engine operating log shall be kept in writing, listing the date of operation, the elapsed time, in hours, and the reason for operation. The log shall be maintained for a minimum of 5 years and shall be made available to AQMD personnel upon request

[RULE 1110.2, 6-3-2005; RULE 1470, 3-4-2005]

[Devices subject to this condition: D34]

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

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

Devices D1, D7, D13, D19, and D25 shall be fully and legally operational within three years of issuance of the Permit to Construct

[RULE 1309.1, 5-3-2002; RULE 1309.1, 8-3-2007]

[Devices subject to this condition: D1, D7, D13, D19, D25]

E193.5 The operator shall install this equipment according to the following requirements:

PM10 emission rates from this equipment shall not exceed 0.060 lb/MW-hr

NOx emission rates from this equipment shall not exceed 0.080 lb/MW-hr

Compliance with the PM10 and NOx emission rates shall be demonstrated once over the life of the project in accordance with condition D29.4

[RULE 1309.1, 5-3-2002; RULE 1309.1, 8-3-2007]

[Devices subject to this condition: D1, D7, D13, D19, D25]

## H. Applicable Rules

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, D25]

#### I. Administrative

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

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 prorated annual emissions increase for the first compliance year 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 first compliance year 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 first compliance year hold a minimum NOx RTCs of 38,664 lbs/year. This condition shall apply during the first 12 months of operation, commencing with the initial operation of the gas turbines.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the first compliance year, hold a minimum NOx RTCs of 30,222 lb/year of NOx RTCs for 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 first compliance year.

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

[Devices subject to this condition: D1, D7, D13, D19, D25]

I296.2 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year 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 first compliance year 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 first compliance year hold a minimum NOx RTCs of 1,851lbs/year.

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 first compliance year.

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

[Devices subject to this condition: D34]

#### K. Record Keeping/Reporting

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## FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

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

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

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

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 (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

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

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

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) 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, D25]

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 after CEMS certification

Natural gas fuel use during the commissioning period

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

[RULE 2012, 5-6-2005]

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### FACILITY PERMIT TO OPERATE WALNUT CREEK ENERGY PARK

### 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):

Date of operation, the elapsed time, in hours, and the reason for operation

[RULE 1110.2, 6-3-2005]

[Devices subject to this condition: D34]

User: monitor Host: xena.aqmd.gov Class: xena.aqmd.gov Job: fp1\_146536

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### FINAL DETERMINATION OF COMPLIANCE WALNUT CREEK ENERGY, LLC

### **COMPANY NAME AND ADDRESS**

Walnut Creek Energy, LLC % Edison Mission Energy 18101 Von Karman Avenue Irvine, CA 92612 **EQUIPMENT LOCATION** 911 Bixby Drive City of Industry, CA 91744

### **EQUIPMENT DESCRIPTION**

Section H of the Facility Permit

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 1: INTERNAL COMBUSTIO	N				
System 1: GAS TURBINES, POWER	GENE	RATION			
GAS TURBINE, UNIT NO. 1, NATURAL GAS, GENERAL ELECTRIC MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F WITH WATER INJECTION, WITH AN 450894  GENERATOR, 104 MW	D1	СЗ	NOX: MAJOR SOURCE	CO: 6.0 PPMV NATURAL GAS (4) [Rule 1703(a)(2) – PSD-BACT]; CO: 2000 PPMV (5) [Rule 407]  NOX: 15 PPMV NATURAL GAS (8) [40CFR60 Subpart KKKK]; NOX: 123.46  LB/MMCF (1) [Rule 2012]  NOX 10.29 LB/MMCF NATURAL GAS (1)[Rule 2012] NOX 2.5 PPMV  NATURAL GAS (4)[Rule 2012] NOX 2.5 PPMV  NATURAL GAS (4)[Rule 2005-BACT]; NOX: 0.080 LB/MW-hr  [Rule 1309.1]  VOC: 2.0 PPMV (4)[Rule 1303(a)(1)-BACT]  PM10: 0.01 GRAIN/DSCF  (5A) [Rule 475]; PM10: 0.1 GRAIN/DSCF (5) [Rule 409]; PM10: 11 LB/HR (5B)  [Rule 475]; PM10: 0.060  LB/MW-hr [Rule 1309.1]  SOX: 0.06 LB/MMCF (8) [40 CFR60 Subpart KKKK]; SO2: (9) Acid Rain Provisions	A63.1, A99.1, A99.2, A99.3, A99.4, A195.1, A195.2, A195.3, A327.1, C1.1, C1.4, D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, E193.4, E193.5, H23.1, I296.1, K40.1, K67.1

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 1: INTERNAL COMBUSTION	ON OC	<u> </u>			
System 1: GAS TURBINES, POWE	R GEN	ERATION			
CO OXIDATION CATALYST NO. 1, ENGLEHARD CAMET, 72 CUBIC FEET OF TOTAL CATALYST VOLUME, WITH A/N: 450899	С3	D1 C4			
SELECTIVE CATALYTIC REDUCTION NO. 1, HALDOR-TOPSOE DNX-920, WITH 718 CUBIC FEET OF TOTAL CATALYST VOLUME, HEIGHT: 28 FT 8 IN; WIDTH: 20 FT 3 IN; DEPTH: 1 FT 8 IN; WITH	C4	S6 C3		NH3: 5.0 PPMV (4) [Rule 1303(a)(1)-BACT]	A195.4 D12.2 D12.3 D12.4 E179.1 E179.2 E193.1
NH3 INJECTION GRID A/N: 450899					
STACK NO. 1, DIAMETER: 13 FT 6 IN, HEIGHT: 90 FT	S6	C4			
A/N: 450894					
GAS TURBINE, UNIT NO. 2, NATURAL GAS, GENERAL ELECTRIC MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F WITH WATER INJECTION, WITH A/N 450895	D7	C9	NOX: MAJOR SOURCE	CO: 6.0 PPMV NATURAL GAS (4) [Rule 1703(a)(2) —PSD-BACT]; CO: 2000 PPMV (5) [Rule 407]  NOX: 15 PPMV NATURAL GAS (8) [40CFR60 Subpart KKKK]; NOX: 123.46 LB/MMCF (1) [Rule 2012]  NOX 10.29 LB/MMCF NATURAL GAS (1)[Rule 2012] NOX 2.5 PPMV NATURAL GAS (4)[Rule 2005-BACT; Rule 1703(a)(2)-PSD-BACT]; NOX: 0.080 LB/MW-hr [Rule 1309.1]	A63.1, A99.1, A99.2, A99.3, A99.4, A195.1, A195.2, A195.3, A327.1, C1.1, C1.4, D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, E493.4, E193.5, H23.1, I296.1, K40.1, K67.1
GENERATOR, 104 MW				VOC: 2.0 PPMV (4)[Rule 1303(a)(1)-BACT]  PM10: 0.01 GRAIN/DSCF (5A) [Rule 475]; PM10: 0.1 GRAIN/DSCF (5) [Rule 409]; PM10: 11 LB/HR (5B) [Rule 475]; PM10: 0.060 LB/MW-hr [Rule 1309.1]  SOX: 0.06 LB/MMCF (8) [40 CFR60 Subpart KKKK]; SO2: (9)	
				Acid Rain Provisions	

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 1: INTERNAL COMBUSTIC	N			<u>'</u>	
System 1: GAS TURBINES, POWE	R GEN	ERATION			
CO OXIDATION CATALYST NO. 2, ENGLEHARD CAMET, 72 CUBIC FEET OF TOTAL CATALYST VOLUME, WITH A/N: 450900	C9	D7 C10			
SELECTIVE CATALYTIC REDUCTION NO. 2, HALDOR-TOPSOE DNX-920, WITH 718 CUBIC FEET OF TOTAL CATALYST VOLUME, HEIGHT: 28 FT 8 IN; WIDTH: 20 FT 3 IN; DEPTH: 1 FT 8 IN; WITH NH3 INJECTION GRID	C10	S12 C9		NH3: 5.0 PPMV (4) [Rule 1303(a)(1)-BACT]	A195.4 D12.2 D12.3 D12.4 E179.1 E179.2 E193.1
A/N: 450900					
STACK NO. 2, DIAMETER: 13 FT 6 IN, HEIGHT: 90 FT	S12	C10			
A/N: 450895					
GAS TURBINE, UNIT NO. 3, NATURAL GAS, GENERAL ELECTRIC MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F WITH WATER INJECTION, WITH A/N 450896	D13	C15	NOX: MAJOR SOURCE	CO: 6.0 PPMV NATURAL GAS (4) [Rule 1703(a)(2) -PSD-BACT]; CO: 2000 PPMV (5) [Rule 407]  NOX: 15 PPMV NATURAL GAS (8) [40CFR60 Subpart KKKK]; NOX: 123.46 LB/MMCF (1) [Rule 2012]  NOX 10.29 LB/MMCF NATURAL GAS (1)[Rule 2012] NOX 2.5 PPMV NATURAL GAS (4)[Rule 2005-BACT]; Rule 1703(a)(2)-PSD-BACT]; NOX: 0.080 LB/MW-hr [Rule 1309.1]  VOC: 2.0 PPMV (4)[Rule 1303(a)(1)-BACT]	A63.1, A99.1, A99.2, A99.3, A99.4, A195.1, A195.2, A195.3, A327.1, C1.1, C1.4, D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, E193.4, E193.5, H23.1, I296.1, K40.1, K67.1
GENERATOR, 104 MW				PM10: 0.01 GRAIN/DSCF (5A) [Rule 475]; PM10: 0.1 GRAIN/DSCF (5) [Rule 409]; PM10: 11 LB/HR (5B) [Rule 475]; PM10: 0.060 LB/MW-hr [Rule 1309.1] SOX: 0.06 LB/MMCF (8) [40 CFR60 Subpart KKKK]; SO2: (9) Acid Rain Provisions	

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Equipment Description (Continued)

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 1: INTERNAL COMBUSTION	N				
System 1: GAS TURBINES, POWE	R GENI	ERATION			
CO OXIDATION CATALYST NO. 3, ENGLEHARD CAMET, 72 CUBIC FEET OF TOTAL CATALYST VOLUME, WITH A/N: 450901	C15	D13 C16			
SELECTIVE CATALYTIC REDUCTION NO. 3, HALDOR-TOPSOE DNX-920, WITH 718 CUBIC FEET OF TOTAL CATALYST VOLUME, HEIGHT: 28 FT 8 IN; WIDTH: 20 FT 3 IN; DEPTH: 1 FT 8 IN; WITH	C16	S18 C15		NH3: 5.0 PPMV (4) [Rule 1303(a)(1)-BACT]	A195.4 D12.2 D12.3 D12.4 E179.1 E179.2 E193.1
NH3 INJECTION GRID A/N: 450901					
STACK NO. 3, DIAMETER: 13 FT 6 IN, HEIGHT: 90 FT	S18	C16			
A/N: 450896					
GAS TURBINE, UNIT NO. 4, NATURAL GAS, GENERAL ELECTRIC MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F, WITH WATER INJECTION, WITH A/N 450897	D19	C21	NOX: MAJOR SOURCE	CO: 6.0 PPMV NATURAL GAS (4) [Rule 1703(a)(2) -PSD-BACT]; CO: 2000 PPMV (5) [Rule 407]  NOX: 15 PPMV NATURAL GAS (8) [40CFR60 Subpart KKKK]; NOX: 123.46 LB/MMCF (1) [Rule 2012]  NOX 10.29 LB/MMCF NATURAL GAS (1)[Rule 2012]  NOX 2.5 PPMV NATURAL GAS (4)[Rule 2005-BACT]; NOX: 0.080 LB/MW-hr [Rule 1309.1]  VOC: 2.0 PPMV (4)[Rule	A63.1, A99.1, A99.2, A99.3, A99.4, A195.1, A195.2, 195.3, A327.1, C1.1, C1.4, D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, 193.4, E193.5, H23.1, I296.1, K40.1, K67.1
GENERATOR, 104 MW				1303(a)(1)-BACT]  PM10: 0.01 GRAIN/DSCF (5A) [Rule 475]; PM10: 0.1 GRAIN/DSCF (5) [Rule 409]; PM10: 11 LB/HR (5B) [Rule 475]; PM10: 0.060 LB/MW-hr [Rule 1309.1]  SOX: 0.06 LB/MMCF (8) [40 CFR60 Subpart KKKK]; SO2: (9) Acid Rain Provisions	

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Equipment Description (Continued	d)				
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 1: INTERNAL COMBUSTION	NC			· <del></del>	
System 1: GAS TURBINES, POWE	R GEN	ERATION			
CO OXIDATION CATALYST NO. 4, ENGLEHARD CAMET, 72 CUBIC FEET OF TOTAL CATALYST VOLUME, WITH A/N: 450904	C21	D19 C22			
SELECTIVE CATALYTIC REDUCTION NO. 4, HALDOR-TOPSOE DNX-920, WITH 718 CUBIC FEET OF TOTAL CATALYST VOLUME, HEIGHT: 28 FT 8 IN; WIDTH: 20 FT 3 IN; DEPTH: 1 FT 8 IN; WITH	C22	S24 C21		NH3: 5.0 PPMV (4) [Rule 1303(a)(1)-BACT]	A195.4 D12.2 D12.3 D12.4 E179.1 E179.2 E193.1
NH3 INJECTION GRID A/N: 450904					
STACK NO. 4, DIAMETER: 13 FT 6 IN, HEIGHT: 90 FT	S24	C22			
A/N: 450897					
GAS TURBINE, UNIT NO. 5, NATURAL GAS, GENERAL ELECTRIC MODEL LMS100PA, SIMPLE CYCLE, 904 MMBTU/HR AT 45 DEGREES F WITH WATER INJECTION, WITH A/N 450898	D25	C27	NOX: MAJOR SOURCE	CO: 6.0 PPMV NATURAL GAS (4) [Rule 1703(a)(2) – PSD-BACT]; CO: 2000 PPMV (5) [Rule 407]  NOX: 15 PPMV NATURAL GAS (8) [40CFR60 Subpart KKKK]; NOX: 123.46 LB/MMCF (1) [Rule 2012] NOX 10.29 LB/MMCF NATURAL GAS (1)[Rule 2012] NOX 2.5 PPMV NATURAL GAS (4)[Rule 2005-BACT; Rule 1703(a)(2)- PSD-BACT]; NOX: 0.080 LB/MW-hr [Rule 1309.1]  VOC: 2.0 PPMV (4)[Rule 1303(a)(1)-BACT]	A63.1, A99.1, A99.2, A99.3, A99.4, A195.1, A195.2, A195.3, A327.1, C1.1, C1.4, D12.1, D12.7, D29.1, D29.2, D29.3, D29.4, D82.1, D82.2, E193.1, E193.3, E193.4, E193.5, H23.1, I296.1, K40.1, K67.1
GENERATOR, 104 MW				PM10: 0.01 GRAIN/DSCF (5A) [Rule 475]; PM10: 0.1 GRAIN/DSCF (5) [Rule 409]; PM10: 11 LB/HR (5B) [Rule 475]; PM10: 0.060 LB/MW-hr [Rule 1309.1] SOX: 0.06 LB/MMCF (8) [40 CFR60 Subpart KKKK]; SO2: (9) Acid Rain Provisions	·

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Equipment Description (Continued)

Equipment Description (Continued	<u>u)</u>				<del></del>
Equipment	No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 1: INTERNAL COMBUSTION	ON				
System 1: GAS TURBINES, POWE	R GEN	ERATION			
CO OXIDATION CATALYST NO. 5, ENGLEHARD CAMET, 72 CUBIC FEET OF TOTAL CATALYST VOLUME, WITH A/N: 450907	C27	D25 C28			
SELECTIVE CATALYTIC REDUCTION NO. 5, HALDOR-TOPSOE DNX-920, WITH 718 CUBIC FEET OF TOTAL CATALYST VOLUME, HEIGHT: 28 FT 8 IN; WIDTH: 20 FT 3 IN; DEPTH: 1 FT 8 IN; WITH	C28	S30 C27		NH3: 5.0 PPMV (4) [Rule 1303(a)(1)-BACT]	A195.4 D12.2 D12.3 D12.4 E179.1 E179.2 E193.1
NH3 INJECTION GRID A/N: 450907					
STACK NO. 5, DIAMETER: 13 FT 6 IN, HEIGHT: 90 FT	S30	C28			
A/N: 450898					
System 2: EMERGENCY FIRE PUMP					
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, DIESEL FUEL, LEAN BURN, CLARKE, MODEL JW6H-UF50, 340 BHP WITH AFTERCOOLER, TURBOCHARGER,	D34		NOX: PROCESS UNIT	NOX+NMHC: 4.65 GM/BHP-HR DIESEL RULE 2005; Rule 1703(a)(2)-PSD-BACT ; NOX: 469 LB/1000 GAL DIESEL (1) [RULE 2012]	C1.3, B61.1, D12.5, D12.6, E193.1, E193.2, I296.2, K67.2
A/N: 450908				CO: 0.45 GM/BHP-HR DIESEL (4) [ Rule 1703(a)(2)-PSD-BACT]	
				PM10: 0.09 GM/BHP-HR DIESEL (4) [Rule 1303- BACT]	
				SOX: 0.0055 GM/BHP-HR DIESEL (4) [RULE 1303- BACT; RULE 1703(a)(2)- PSD-BACT]	
Process 2: INORGANIC CHEMICAL	STORA	GE			
STORAGE TANK, TK-1, FIXED ROOF, 19 PERCENT AQUEOUS AMMONIA, DIAMETER: 12'-0"; HEIGHT: 12'-0"; 16,000 GALLONS WITH PRV SET AT 25 PSIG WITH A/N: 451185	D31				C157.1, E144.1,E193.1

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Section D of the Facility Permit

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
Process 3: RULE 219 EXEMPT EQU		IT SUBJECT TO	SOURCE SPECIF	IC RULES	
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATING				VOC: (9) [Rule 1113], Rule 1171	K67.3
RULE 219 EXEMPT EQUIPMENT, EXEMPT HAND WIPING OPERATIONS				VOC: (9) [Rule 1171]	

### BACKGROUND

WCEP submitted an application for certification (05-AFC-2) to the CEC on November 22, 2005 seeking certification for the new power plant. In addition to the CEC certification process, WCEP submitted applications to AQMD seeking Permits to Construct for the new power plant. The following table shows the corresponding application numbers (A/Ns):

Table 1 - Applications for Permits to Construct Submitted to AQMD

Application Number	Equipment Description
150894	Gas Turbine No. 1
450895	Gas Turbine No. 2
150896	Gas Turbine No. 3
150897	Gas Turbine No. 4
150898	Gas Turbine No. 5
150899	SCR/CO Catalyst for Turbine No. 1
150900	SCR/CO Catalyst for Turbine No. 2
150901	SCR/CO Catalyst for Turbine No. 3
150904	SCR/CO Catalyst for Turbine No. 4
150907	SCR/CO Catalyst for Turbine No. 5
150908	Emergency Fire Pump Engine
51185	Aqueous Ammonia Storage Tank
150854	Initial Title V Application

The Preliminary Determination of Compliance (PDOC) was issued on October 31, 2006. The Public Notice was published in the Los Angeles Daily News, the San Gabriel Valley Tribune, and the Spanish newspaper La Opinión. The notice was published in all three newspapers on November 15, 2006. The original Public Notice, engineering analysis and draft permit were submitted to the applicant on November 15, 2006, with copies being forwarded to the CEC, EPA, ARB, Federal Land Manger, State Land Manager, SCAG, and the Manager of the City of Industry. The applicant distributed copies of the Public Notice to each address within a ¼ mile radius of the project on December 19, 2006, and provided proof of such distribution in a January 4, 2007 letter from EME to AQMD (see file) which described the method of determining the addresses within the ¼ mile radius and the proof of such mailing in the form of the USPS certification.

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AQMD received a total of four (4) comment letters during the 30-day Public Notice period, one in which the applicant provided their comments to the draft analysis and permit. SCAG provided a letter in which they indicated that the proposed project did not warrant comments at this time. The two remaining comment letters were from Perrin Manufacturing Company and Hydrogen Ventures, Inc. EPA provided questions on the proposed Title V permit via e-mail in regards to the PM10 modeling under NSR rules, however, EPA elected not to make any formal comments regarding this issue. The FDOC was issued on February 16, 2007. Since the issuance of the FDOC, EPA has published in the Federal Register their final decision to approve AQMD's request to re-designate South Coast Air Basin from Non-Attainment to Attainment for Carbon Monoxide National Ambient Air Quality Standard. EPA has published their proposed decision in the Federal Register on February 24, 2007 and the comment period closed on March 16, 2007 with no comments received by EPA. Therefore, EPA has granted the State's request to re-designate South Coast as attainment for CO effective June 11, 2007. Therefore, based on this decision, and pursuant to Rule 1303(b) there will be no offset required for emission increases for permits issued on or after June 11, 2007

On August 3, 2007 AQMD Governing Board amended Rule 1309.1 to include several new requirements for power plants.

On August 15, 2007, EPA and AQMD signed a Partial PSD Delegation Agreement, which is intended to delegate the authority and responsibility to AQMD for issuance of initial PSD permits and PSD permit modifications. (The PSD requirements for WCEP are shown in greater detail in the Regulation XVII PSD Analysis" below).

Since the requirements of Rule 1309.1 as amended on August 3, 2007 have changed significantly since WCEP originally requested access to the Priority Reserve, it has been determined by AQMD Management that a new 30-day Public Notice period pursuant to Rule 212(g) and Rule 3006(a) as well as a 45-day EPA review period are required prior to issuance of the permits to construct. An Amendment to the Determinations of Compliance was issued on January 11, 2008. The Public Notice was published in the Los Angeles Daily News and the Spanish newspaper La Opinión. The notice was published in La Opinión on January 18, 2008 and in the Los Angeles Daily News on January 21, 2008. The Public Notice, engineering analysis and draft permit were submitted to the applicant on January 11, 2008 with copies being forwarded to the CEC, EPA, ARB, Federal Land Manger, State Land Manager, SCAG, and the Manager of the City of Industry. The applicant distributed copies of the Public Notice to each address within a ¼ mile radius of the project on January 15, 2008, and provided proof of such distribution in a February 14, 2008 letter from EME to AQMD (see file) which described the method of determining the addresses within the ¼ mile radius and the proof of such mailing in the form of the USPS certification.

In addition, an Amendment to the Determinations of Compliance was issued on January 11, 2008 to address the new requirements in the August 3, 2007 version of Rule 1309.1, and to address the comments received during the 30-day Public Notice and 45-day EPA review periods. The Public notice period ended on February 20, 2008, with no comments received from the public. The following comments were received from the EPA and EME along with AQMD's responses:

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COMMENTS/RESPONSE TO COMMENTS AND PROPOSED REVISIONS TO THE AMENDED DETERMINATION OF COMPLIANCE ISSUED JANUARY 11, 2008:

### Comment No. 1 from EPA

EPA notes that throughout the proposed permit "Rule 1703" is listed as the basis for numerous permit conditions. However, as stated on page 15 of the engineering analysis, total facility emissions of attainment pollutants are less than 250 tpy, therefore the provisions of PSD, as specified in Rule 1703 are not applicable. Accordingly, please remove all references to Rule 1703 as the basis for any condition in the permit.

### AQMD Response

AQMD agrees with EPA in that the applicable major stationary source PSD thresholds for simple cycle power plants is 250 tons per year (tpy) for any attainment pollutant regulated by the federal Clean Air Act. However, Rule 1703(a)(2) requires that each permit unit be constructed using Best Available Control Technology (BACT) for each attainment air contaminant where there is a net emission increase. Since carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>) are attainment air contaminants with increased emissions, Rule 1703(a)(2) applies to this facility. Therefore, the appropriate permit conditions will be revised from the previously tagged "Rule 1703" to state "Rule 1703(a)(2) PSD-BACT".

### Comment No. 2 from EPA

Conditions D12.3 and D12.4 establish temperature and differential pressure ranges for the catalyst. EPA notes that no provisions are made to account for operation during the startup period, during which the catalyst may not be able to comply with the required ranges. If the emission units can not comply during the startup period, the permit should be revised to specify what the temperature and pressure requirements are during the start up period.

### AQMD Response:

AQMD agrees with EPA regarding the need for maximum temperature and pressure limits and will revise conditions D12.3 and D12.4 to include a maximum temperature and pressure limit which cannot be exceeded during the start-up period.

### Comment No. 3 from EPA

Condition C1.4 states that "the operator shall limit the operating time to no more than 4,000 hours in any one year. For the purpose of this condition, operating time shall be defined as a period of twelve (12) consecutive months determined on a rolling basis with a new twelve month period beginning on the first day of each calendar month." (Emphasize added) Please revise the second sentence to read that "one year" rather than "operating time" shall be defined as a period of twelve (12) consecutive months determined on a rolling basis with a new twelve month period beginning on the first day of each calendar month.

### AQMD Response:

AQMD agrees with EPA and will revise the second sentence to read "one year".

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### ENGINEERING ANALYSIS / EVALUATION

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### Comment No. 4 from EPA

While Condition C1.4 limits the annual hours of operation for the turbines, and Condition D12.7 requires the installation of a non-resettable elapsed time meter, EPA could not locate any requirement to monitor and record the hours of operation in Section K of the permit. Please add a condition requiring at least monthly monitoring and recordkeeping of the elapsed time meter readings.

### AQMD Response:

AQMD agrees with EPA and will revise condition D12.7 to require at least monthly monitoring and recordkeeping of the elapsed time meter readings.

### Comment No. 5 from EPA

EPA notes that for several of the conditions related to source testing, found in Subsection D of Section H of the permit (e.g. see Condition D29.3), the required test method is listed as "Approved District Method." Since specific SIP approved test methods are available for each of these tests, the Title V permit must list the specific test methods required to be used. The District may add a condition stating that an alternative test method may be allowed, but only upon both District and EPA concurrence. In a similar manner, many of these same conditions specify that the required Averaging Time is "District-approved averaging time." Again each specific test method has a corresponding required averaging time. Please revise all Conditions in Subsection D to provide specific test method and averaging time requirements.

### AQMD Response:

AQMD concurs with EPA and will make the following revisions to the appropriate source testing conditions: The required averaging time for PM will be revised from "District approved averaging time" to read "4 hours". The required test method for PM will be revised from "Approved District Method" to read "Method 5". The required test method for SOx will be revised from "Approved District Method" to read AQMD Method 307-91." The required test method for VOC will be revised from "Approved District Method" to read "AQMD Method 25.3".

### Comment No. 6 from EME

EME has indicated to AQMD that their interpretation of the language in Rule 1309.1 is that an in-District electrical generating facility located in Zone 2 shall demonstrate compliance with each of the subsections in subparagraph (iii) of the rule with no references to a limitation on total megawatts (MW) of electricity generated. Thus EME does not need proposed condition E193.4 which limits the total electrical generating capacity to 500 MW or less

### AQMD Response:

Upon review of the rule language in Rule 1309.1, the AQMD concurs with this interpretation. Therefore, condition E193.4, will be removed from the amended Determination of Compliance issued on January 11, 2008. Please note that condition E193.4 corresponds to AQ -19 in the CEC AFC document and should be removed accordingly.

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### RECOMMENDATION

Issue Permit to Construct subject to the conditions in the original FDOC dated February 16, 2007 in addition to the following amendments:

- A99.1 The 2.5 PPM NOx emission limits shall not apply during turbine commissioning, startup, and shutdown periods. The commissioning period shall not exceed 134 hours. Startup time shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 10 minutes for each shutdown. The turbine shall be limited to a maximum of 350 start-ups per year. Written records of commissioning, start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

  [Rule 1703(b)(2) PSD-BACT Analysis, Rule 2005]
- The 6.0 PPM CO emission limits shall not apply during turbine commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 134 hours. Start-up time shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 10 minutes for each shutdown. The turbine shall be limited to a maximum of 350 start-ups per year. Written records of commissioning, start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

  [Rule 1703(b)(2) PSD-BACT Analysis]
- A99.5 The 2.0 PPM VOC emission limit shall not apply during turbine commissioning, startup, and shutdown periods. The commissioning period shall not exceed 134 hours. Startup time shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 10 minutes for each shutdown. The turbine shall be limited to a maximum of 350 start-ups per year. Written records of commissioning, start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

  [Rule 1303(a)(1)-BACT]
- A195.1 The 6.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O2, dry. [Rule 1703(b)(2) PSD-BACT Analysis]
- A195.2 The 2.5 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O2, dry. [Rule 1703(b)(2) PSD-BACT Analysis, Rule 2005]
- A195.3 The 2.0 ppmv VOC emission limit(s) is averaged over 60 minutes at 15 percent O2, dry. [Rule 1303(a)(1) BACT]
- B61.2 The operator shall not use natural gas containing the following specified compounds:

Compound	Grains per 100 scf
H2S	0.25

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

[Rule 1303(b) - Offset]

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C1.4 The operator shall limit the operating time to no more than 4,000 hours in any one year.

For the purposes of this condition, operating time one year shall be defined as a period of twelve (12) consecutive months determined on a rolling basis with a new twelve month period beginning on the first day of each calendar month.

[Rule 1309.1]

D12.3 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

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

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

The catalyst temperature range shall remain between 750 degrees F and 817 degrees F The catalyst temperature shall not exceed 817 degrees F during the start-up period

[Rule 1703(b)(2) - PSD-BACT Analysis, Rule 1303(a)(1) - BACT, Rule 2005]

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 twelve months.

The pressure drop across the catalyst shall remain between 5 inches of water column and 7.6 inches of water column.

The pressure drop across the catalyst shall not exceed 7.6 inches of water column during the start-up period.

[Rule 1703(b) (2) - PSD-BACT-Analysis, Rule 1303(a) (1) - BACT, Rule 2005]

D12.7 The operator shall install and maintain a non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

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

The operator shall monitor and record the elapsed time meter readings once on a monthly basis. These records shall maintained for a period of two years and made available to the Executive Officer upon request.

[Rule 1309.1]

D29.1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant to be	Required Test	Averaging Time	Test Location
tested	Method(s)		
	1	}	ł

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NOX emissions	District Method	1 hour	Outlet of the SCR
CO emissions	100.1 District Method	l hour	Outlet of the SCR
CO CINIDATONO	100.1		
SOX emissions	Approved District method AQMD	District approved averaging time.	Fuel Sample
	Method 307-91	Not Applicable	
VOC emissions	Approved District	1 hour	Outlet of the SCR
	method District Method 25.3		
PM10 emissions	Approved District	District approved	Outlet of the SCR
	method District Method 5	averaging time 4 hours	
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet of the SCR

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

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the mass flow rates in lb/hr, 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 maximum, average, and minimum loads.

The test shall be conducted for compliance verification of the BACT VOC  $2.0\,\mathrm{ppmv}$  limit.

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 pre concentration) 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

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

[Rule 1703 PSD PSD-BACT, Rule 1303(a)(1) - BACT, Rule 1303(b)(2) - Offset, Rule 2005]

D29.3 The perator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant to be tested	Required Test Method(s)	Averaging Time	Test Location
SOX emissions	Approved District method AQMD Method 307-91	District approved averaging time Not Applicable	Fuel Sample
VOC emissions	Approved District method District Method 25.3	1 hour	Outlet of the SCR
PM10 emissions	Approved District method District Method 5	District approved averaging time 4 hours	Outlet of the SCR

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

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 allsampling and analytical procedures.

The test shall be conducted when this equipment is operating at maximum, average, and minimum load.

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

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 pre concentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F.

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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 purpose at this time. The test results shall be reported with two significant digits.

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

[Rule 1703(b) (2) PSD-BACT, Rule 1303(a) (1) - BACT, Rule 1303(b) (2) - Offset]

D29.4 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant to be tested	Required Test Method(s)	Averaging Time	Test Location
NOx	District Method 100.1	1 hour	Outlet of the SCR
PM10	Approved District method District Method 5	District approved averaging time 4 hours	Outlet of the SCR

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

The test shall be conducted at full load to demonstrate compliance with the 0.080 1b/MW-hr NOx and 0.060 1b/MW-hr PM10 requirements set forth in Rule 1309.1. If the actual measurement is within the accuracy of the devices used for electrical power measurement, the result will be acceptable.

The lb/MW-hr emission rate of each electrical generating unit shall be determined by dividing (a) the lb/hr emission rate measured at the location and in accordance with the test method specified above, by (b) the adjusted gross electrical output of each electrical generating unit.

The adjusted gross electrical output of each electrical generating unit shall be determined by making the following adjustments to the measured gross electrical output:

- Apply the manufacturer's standard correction factors to calculate gross electrical output at ISO conditions.
- 2) Apply the GE site-specific LMS100 power degradation curve to adjust measured gross electrical output, as corrected to ISO conditions, to undegraded electrical generating unit conditions as defined by the turbine

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manufacturer. The maximum power degradation adjustment shall not exceed 1 percent.

The test shall be conducted in accordance with District approved test protocol. The protocol shall be submitted to the District engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the electrical generating unit during the test, the correction and degradation factors and documentation of their validity, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

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

[Rule 1309.1]

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

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

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

CO Emission Rate, lbs/hr = K Cco Fd[20.9/20.9% - %02 d)][(Qg \* HHV)/106], where

 $K = 7.267 *10^{-8} (lb/scf)/ppm$ 

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

Fd = 8710 dscf/MMBTU natural gas

%O<sub>2</sub> d = Hourly ave. % by vol. O<sub>2</sub> dry, corresponding to Cco

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

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

[Rule 1703(b)(2) - PSD-BACT Analysis, Rule 1303(a)(1) BACT]

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