



South Coast Air Quality Management District

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

April 29, 2011

Mr. Gerardo Rios
Chief – Permits Office
U. S. EPA, Region IX
75 Hawthorne Street, Air 3
San Francisco, CA 94105

Subject: Harbor Cogeneration Company, LLC (ID 156741) – Title V Permit Revision

Dear Mr. Rios:

Harbor Cogeneration Company, LLC has proposed to revise its Title V permit by changing the permit condition for the gas turbine (Device No. D1). This proposed permit revision is considered as a “minor permit revision” to their Title V (A/N 518374) permit. Attached for your review is the evaluation and permit for this proposed revision. With your receipt of the proposed revision today, we will note that the EPA 45-day review period begins on April 29, 2011.

If you have any questions or need additional information regarding the proposed permit revision, please call Mr. Kenneth L. Coats (909) 396-2527.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Brian L. Yeh', is written over a horizontal line.

Brian L. Yeh
Senior Manager
Mechanical, Chemical, and Public Services

cc: Ron Hoffard, Harbor Cogeneration Company, LLC

BLY:AYL:JTY:KLC
Attachments

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>STATIONARY SOURCE COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 9	PAGE 1
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PERMIT TO CONSTRUCT/OPERATE

COMPANY NAME AND ADDRESS

Contact: Ron Hoffard, (562) 495-3140

Harbor Cogeneration Company, LLC
505 Pier B Avenue
Wilmington, CA 90744
SCAQMD ID #156741

EQUIPMENT LOCATION

Same As Above

EQUIPMENT DESCRIPTION

Section D of the facility permit:

Process 1: EXTERNAL COMBUSTION					
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
GAS TURBINE, NATURAL GAS, GENERAL ELECTRIC, MODEL PG711EA, FRAME 7, WITH STEAM OR WATER INJECTION, 1,080 MMBTU/HR, WITH A/N 518361 COMPRESSOR, 2,000 HP FUEL BOOSTER COMPRESSOR, 1500 HP FUEL BOOSTER GENERATOR, 82.3 MW BOILER, WASTE HEAT RECOVERY, 468,630 LB/HR STEAM, UNFIRED GENERATOR, HP STEAM TURBINE GENERATOR, WESTINGHOUSE, ST-801, G-801, 13,800 VOLTS, 12.5MW GENERATOR, LP STEAM TURBINE GENERATOR, DE LAVAL, ST-802, G-802, 4,160 VOLTS, 11.5 MW	D1	C2	NOX: MAJOR SOURCE	CO: 10 PPMV (4) [BACT]; CO: 2000 PPMV (5) [RULE 407]; NOX: 7.5 PPMV (4) [BACT]; NOX: 78 PPMV (8) [40 CFR 60 SUBPART GG]; PM: 0.01 GRAINS/SCF (5B) [RULE 475]; PM: 0.1 GRAINS/SCF (5) [RULE 409]; PM: 11 LB/HR (5A) [RULE 475]; SOX: 150 PPMV (8) [40 CFR 60 SUBPART GG]	A99.1, A99.2 A195.1, A195.2 A327.1, B59.1 D12.1, E73.2 E484.1, H23.1 H23.4, K40.1

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Process 1: EXTERNAL COMBUSTION					
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
OXIDIZER, CATALYST, CARBON MONOXIDE, WIDTH: 39 FT 5 IN; HEIGHT: 35 FT; LENGTH 4 IN WITH A/N: 487077	C2	D1 C3			
SELECTIVE CATALYTIC REDUCTION, HONEYCOMB CATALYST BED, WIDTH: 39 FT 5 IN; HEIGHT: 35 FT; LENGTH: 2 FT 9 IN; WITH AMMONIA INJECTION, GRID A/N: 487077	C3	C2 S4		NH3: 20 PPMV NATURAL GAS (4) [BACT]	D12.3, D29.1 E73.1, K40.1
STACK A/N: 518361	S4	C3			D82.1

FACILITY BACKGROUND

Harbor Cogeneration Company, LLC is a RECLAIM and Title V facility which operates in combined cycle and consists of a GE Frame 7 gas turbine rated at 1,080 MMBTU/hr coupled to an electrical generator with a rating of 82.3 MW. High and low pressure steam is produced in the waste heat recovery boiler (unfired) and is exhausted through 2 steam turbines rated at 11.5 MW and 12.5 MW. Therefore the total net electrical output (MW) from the facility is 106.3 MW.

Harbor Cogeneration Company, LLC commenced operations in 1988 as a cogeneration facility with the Frame 7 unit fired on both natural gas and field gas obtained from the nearby oil production operations. The steam generated from the turbine was used for injection into an oil well. Since 1997 Harbor Cogeneration Company, LLC began using exclusively pipeline quality natural gas as a fuel for the gas turbine. The plant began operations as a merchant power plant in 1999 and is no longer operating as a cogeneration facility, although the name of the facility remained unchanged. The steam from the waste heat boiler is currently not being recovered for use. As a merchant power plant operating on a per-demand basis, the turbine began routine start-ups and shutdowns due to periodic grid demand. Harbor Cogeneration Company, LLC has BACT limits of 10 ppmv and 7.5 ppmv for CO and NOx, respectively, based on a 15 minute average. Although the facility complies with current BACT limits for NOx and CO during the steady state (normal operations) it is not practical for a gas turbine to meet BACT concentration limits during the initial start-up and shutdown periods (thermal stabilization periods) because the catalysts do not reach sufficient operating temperature.

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As a result, Harbor Cogeneration Company, LLC was advised by their consultant in 2004 to submit applications for change of conditions to add NOx and CO concentration limits to their permit to provide a higher-than-BACT threshold for NOx and CO emissions during the start-up and shutdown periods of the gas turbine. Specifically, the facility requested relief from BACT limits for NOx and CO (7.5 ppmv and 10 ppmv, respectively) during the 2 hour start-up and shutdown periods. The facility requested NOx and CO concentration limits of 50 and 60 ppmv, respectively, during the start-up and shutdown periods based on data taken from the original CEMS which was equipped with only a single point probe. At the same time, the applicant also submitted an application for a replacement CEMS which would be configured with a multi-point probe and a single span range for both NOx and CO of 0-20 ppmv. Therefore conditions A99.1 and A99.2 were proposed for re-wording to include the concentration limits for NOx and CO during start-up and shutdown periods. In December 2004 the facility's replacement CEMS, which was equipped with a multi-point probe and a single span range for both NOx and CO of 0-20 ppmv was approved, condition D12.2, which required the facility to continuously monitor the ammonia to emitted NOx mole ratio was also eliminated. Some minor typographical errors on the permit were also corrected at this stage. There were no modifications or change of conditions proposed for the SCR/CO catalyst systems. Table 1 below lists the applications submitted to AQMD for change of conditions and the date of approval:

Table 1 – Applications for Change of Conditions

A/N	Equipment	Date Submitted	Conditions	Date Approved
430440	Gas Turbine	5/27/2004	A99.1, A99.2, D12.2	12/8/2004
430441	Title V Minor Modification	5/27/2004	N/A	12/8/2004

Harbor Cogeneration Company, LLC submitted additional applications as described in Table 2 below to permit a small boiler rated at 0.214 MMBTU/hr, which is used as a steam cleaner at the facility, as well as an application to add condition E481.1 to the gas turbine to qualify it as an intermittently operating source.

Table 2 – Additional applications submitted

A/N	Equipment	Date Submitted	Action	Date Approved
447323	Gas Turbine	8/2/2005	P/O	3/28/2006
447324	Title V Minor Permit Modification	8/2/2005	Approved	3/28/2006
446549	Boiler < 2 MMBTU/hr	7/5/2005	P/O no P/C	6/1/2007
446548	Title V Minor Modification	7/5/2005	Approved	6/1/2007

Change of Ownership

In July 2008, the applicant informed AQMD that the existing ownership of the facility was transferred from Black Hills Generation, Inc. (ID No. 106325) to Southwest Generation Operating Company, LLC. The new owner also indicated that Harbor Cogeneration Company, LLC will remain the permittee and operator of the facility. Harbor Cogeneration Company, LLC submitted the following applications listed in Table 3 for Change of Ownership for the existing power plant.

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Table 3 – Applications for Change of Ownership

Application Number	Equipment Description	Submittal Date
487075	Gas Turbine, GE Frame 7	9/19/2008
487077	SCR/CO Catalyst	9/19/2008
487078	Boiler, < 2 MMBTU/hr (steam cleaner)	9/19/2008
500307	Title V Administrative Revision	7/9/2009

The above applications were approved for change of ownership on 11/3/2010 under the new AQMD ID No. 156741. The gas turbine is currently operating under existing P/O No. G10600 (A/N 487075).

COMPLIANCE RECORD

At a recent inspection of the facility, it was noted by the facility's assigned AQMD inspector that the replacement CEMS, as certified in 2004 with a single span of 0-20 ppmv, was not adequate to establish compliance with the existing 50 ppmv and 60 ppmv concentration limits during start-up for NOx and CO, respectively. And furthermore, based on the location of the single point probe, the emission values of 50 and 60 ppmv for NOx and CO were not representative of the actual stack emission concentrations of these pollutants, which can be in the 100's of ppmv for a few minutes during start up and/or shutdown periods. Therefore, on November 9, 2010, Harbor Cogeneration Company, LLC was served with a Notice to Comply (NC No. E00707, see engineering file) which required the facility comply with Rule 2012(c)(2)(A) by measuring all applicable variables for CO and comply with Rule 218.1 (b)(1)(C)(i) and (ii) (full span range) and calculating emissions during the start-up and shutdown periods using proper methodology. Based on a recent search of the AQMD compliance database, no additional NOV's or NC's were issued to this facility within the past 3 years from 2/23/2008 through 2/23/2011.

APPLICATION FOR CHANGE OF CONDITIONS

To address the inadequate span range of the previous CEMS along with other minor issues raised in the NC, Harbor Cogeneration Company, LLC submitted an application for a new CEMS which is configured with a multi-point probe and an adequately sized span range to quantify NOx and CO emission concentrations during start-up and shutdown periods. The CEMS application received initial AQMD approval on February 1, 2011. The facility was also directed to submit one application (A/N 518361) for change of conditions to modify their existing start-up and shutdown emission concentration limits and averaging times based on data collected from the CEMS upon certification. Specifically, Harbor Cogeneration proposes to amend conditions A99.1 and A99.2 by removing the existing concentration limits for NOx and CO during start-up and changing these limits to a mass basis based on data collected from the new CEMS. The facility also proposes to remove condition E481.1 from the gas turbine since it is now expected to operate more than 72 consecutive hours in any calendar quarter and more than 240 hours on a cumulative basis. The facility is not proposing any increase in fuel usage or equipment operation. The facility is also proposing a maximum of 2 start-ups per day and 2 shutdowns per day, with each start-up lasting two hours. A shutdown will last one hour.

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PROCESS DESCRIPTION

The plant operates to supply electrical power to the grid on a demand basis and operates in combined cycle. The high and low pressure steam produced in the waste heat recovery boiler is exhausted through separate non-condensing steam turbine generators each rated at 12.5 MW and 11.5 MW. The total electricity produced is based on the electrical output of the gas turbine generator and the two steam turbine generators.

Emissions are controlled through water injection into the gas turbine compressor for control of NOx emissions. Catalyst modules for carbon monoxide oxidation as well as NOx reduction are contained in the heat recovery boiler within the turbine exhaust flow path. The CO catalyst will reduce CO emissions to BACT levels and ammonia injection is used in the exhaust stream to further reduce NOx emissions to BACT levels.

EMISSIONS

The facility's previous PTE was based on the gas turbine operating for 24 hours per day, 7 days per week and 365 days per year. (However, Harbor Cogeneration's actual emissions were much lower than their PTE because the gas turbine was functioning as an intermittently operated source in accordance with Attachment C of Rule 2012(B)(2)(d)(ii)). The previous PTE is shown in Table 4 below:

Table 4 – Previous facility PTE

Pollutant	Uncontrolled lb/hr	Controlled lb/hr	Uncontrolled lb/day	Controlled lb/day	lb/year	30DA
CO	21.04	4.20	505	101	36,792	101
NOx	159.9	28.9	3,839	691	252,215	691
PM10	2.5	2.5	60	60	21,900	60
VOC	2.0	2.0	48	48	17,520	48
SOx	2.8	2.8	67	67	24,528	67

Harbor Cogeneration has provided CEMS data from two recent tests to document expected NOx and CO emissions during the start-up and shutdown periods. The expected NOx and CO CEMS concentrations are included in the engineering file and have been converted to mass emissions. Harbor Cogeneration is proposing the following operating schedule in Table 5 for the gas turbine:

Table 5 – Proposed Operating Schedule

	Annual	Monthly	Daily
Hours	3500	300	20
Start-ups	330	28	2
Shutdowns	330	28	2
Total	4490	384	24

The proposed change of conditions will result in the following new PTE for the facility shown in Table 6 below, based on the above operation schedule. The values in Table 6 below include up to 2 start-ups and shutdowns per day:

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Table 6 – New Facility PTE

Pollutant	Uncontrolled lb/hr	Controlled lb/hr	Uncontrolled lb/day	Controlled lb/day	lb/month	lb/year	30DA
CO	22.0	2.2	1,010.03	101.03	3,031.84	36,840.00	101.03
NOx	242.0	24.2	4,344.40	434.44	13,467.60	157,860.00	434.44
PM10	2.5	2.5	30.97	30.97	960.00	11,220.00	30.97
VOC	1.0	1.0	12.39	12.39	384.00	4,500.00	12.39
SOx	2.8	2.8	34.68	34.68	1,075.20	12,580.00	34.68

Table 7 below is a comparison of the 30 day average emissions prior to and after the change of conditions:

Table 7 – Previous and New Facility PTE

Pollutant	Previous 30 DA Emissions, lb/day	30DA Emissions after requested change of conditions, lb/day	Increase (Yes/No)
CO	101	101.03	No
NOx	691	434.44	No
PM10	60	30.97	No
VOC	48	12.39	No
SOx	67	34.68	No

RULES EVALUATION

RULE 212 – Standards for Approving Permits

This equipment is not located within 1,000 feet of a school, the maximum MICR is not expected to increase as a result of the change of conditions, and there is no increase in criteria pollutant emissions. Therefore, no public notice is required.

RULE 401 – Visible Emissions

Visible emissions are not expected under normal operation of this equipment.

RULE 402 – Nuisance

Nuisance problems are not expected under normal operation of this equipment.

RULE 431.2 – Sulfur Content of Liquid Fuels

The boiler will use diesel fuel with a sulfur content of 15 ppm. Compliance is expected.

RULE 407–Liquid and Gaseous Air Contaminants

CO and NOx emission limits s will be in compliance with the use of natural gas.

RULE 409 – Combustion Contaminants

The Rule requires the PM emissions to be at 0.1 gr/scf @12% CO2. The gas turbine is expected to meet this limit based on the following calculations:

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Exhaust flow rate 31.8 mmscf/hr
 Maximum PM emissions 2.5 lb/hr
 %CO2 in exhaust 3%

Grain Loading = (2.5 lb/hr*7,000 gr/lb)(12/3)/ 31.8 mmscfh = 0.0022 gr/scf

0.0022 gr/scf << 0.1 gr/scf
 Compliance is expected

RULE 431.1 – Sulfur Content of Gaseous Fuels

Pipeline quality natural gas is used which will comply with rule requirements

RULE 475 – Electric Power Generating Equipment

The rule requires compliance with a PM emission limit of either 11 lb/hr or 0.01 gr/scf. Compliance is demonstrated either the mass emission limit or the concentration emission limit is met. Emissions from the gas turbine are 2.5 lb/hr and 0.0022 gr/scf. Compliance is expected.

REGULATION XIII – New Source Review

There is no increase in emissions due to the proposed change of conditions. Therefore, NSR is not triggered.

RULE 1401- New Source Review for Toxic Air Contaminants

There is no increase in emissions of toxic air contaminants due to the change of conditions. Therefore the facility is exempt under Rule 1401(g)(1)(B).

RULE 2005 – NSR for RECLAIM

The proposed change of conditions will have no impact on NOx emissions from the gas turbine. Therefore, modeling and additional RTCs are not required. The facility is currently complying with BACT emission limit of 7.5 ppmv. Continued compliance is expected.

RULE 2012 – Requirements for Monitoring, Reporting and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

The facility is a major source for NOx and is required to calculate emissions during start-up and shutdown periods. The proposed modifications to the CEMS will enable the facility to comply with the monitoring reporting and recordkeeping requirements in this rule.

Regulation XXX – Title V

The facility is currently subject to the Title V requirements. Since the proposed change of conditions is a minor modification, the facility is subject to a 45-day EPA review.

CONCLUSION:

Upon satisfactory completion of the EPA 45-day review period, issue a Permit to Construct/Operate for the gas turbine with revised conditions as follows:

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CONDITIONS:

- A99.1. ~~The 10 PPM CO emission limit shall not apply when the gas turbine is in start-up or shutdown mode. During start-up or shutdown, the CO concentration shall not exceed 60 ppmv (dry at 15 percent oxygen, 15 min. average). during turbine start-up and shutdown periods. Start-up time shall not exceed 120 minutes per start-up. Shutdown time shall not exceed 60 minutes per shutdown. The turbine shall be limited to a maximum of 2 start ups per day and 2 shutdowns per day. Written records of start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer. During start-up, the CO emissions shall not exceed 58.9 lb. During shutdown, CO emissions shall not exceed 29.4 lb. The total start-up and shutdown thermal stabilization period on any operating day shall not exceed two hours~~
- A99.2. ~~The 7.5 PPM NOX emission limit shall not apply when the gas turbine is in start-up or shutdown mode. During start-up or shutdown, the NOX concentration shall not exceed 50 ppmv (dry at 15 percent oxygen, 15 min. average). during turbine start-up and shutdown periods. Start-up time shall not exceed 120 minutes per start-up. Shutdown time shall not exceed 60 minutes per shutdown. The turbine shall be limited to a maximum of 2 start ups per day and 2 shutdowns per day. Written records of start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer. During start-up, the NOx emissions shall not exceed 147.8 lb. During shutdown, NOx emissions shall not exceed 73.9 lb. The total start-up and shutdown thermal stabilization period on any operating day shall not exceed two hours~~
- A195.1 The 10 PPM CO emission limit is averaged over 15 minutes at 15% O₂, dry basis.
- A195.2 The 7.5 PPM NOX emission limit is averaged over 15 minutes at 15% O₂, dry basis.
- E481.1 ~~This device qualifies as an intermittently operating source. The operator may postpone the due date of a semi-annual assessment for the continuous emission monitoring system (CEMS) serving this device to the end of the next calendar quarter by conducting an alternative relative accuracy test audit during the same quarter the semi-annual assessment is due. The semi-annual assessment due date shall only be postponed if the alternative relative accuracy test audit is conducted according to and meet the criteria specified under Rule 2012, Appendix A, Attachment C, Subparagraph B.2.d, as amended January 7, 2005~~

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APPENDIX

1. CEMS Data for start-up/shutdown periods
2. Notice to Comply (NC E00707)

South Coast AQMD Monthly Emissions Calculations (lbs)

Turbine 1		lbs/hr	lbs/day	31 day	30 day avg	Offsets Req'd		Annual
				lbs/month	lbs/month	lb-day	TPY	
	NOx	24.2	434.44	13467.6	13033.2	0.0	0	78.93
	CO	2.2	101.03	3131.84	3030.8	3637.0	121.2	18.42
	VOC	1	12.39	384	371.6	445.9	14.9	2.25
	PM10/PM2.5	2.5	30.97	960	929.0	1114.8	37.2	5.61
	SOx	2.8	34.68	1075.2	1040.5	1040.5	0	6.29
Max Month Avg Daily Emissions (lb-day)				NOx	CO	VOC	PM10/PM2.5	SOx
(adjusted for the ERC ratio)				N/A	18.4	2.7	6.7	6.3

Total Annual Emissions (tons):	NOx	CO	VOC	PM10/PM2.5	SOx
	78.9	18.4	2.2	5.6	6.3
Permit Limits tpy	126.2	18.4	8.7	10.9	12.2
Permit Limits lb/day	691	101	24	60	67

Monthly Operations Data

Base		Annual	Max Month		Normal	Startup	Shutdown
					lbs/hr	lb/event	lb/event
	Hours	3500	300	NOx	24.2	147.8	73.9
	Startups	330	28	CO	2.2	58.35	29.43
	Shutdowns	330	28	VOC	1	2	1
	Total	4490	384	PM10/PM2.5	2.5	5	2.5
				SOx	2.8	5.60	2.80

RTCs for NOx and SOx based on a 1:1 ratio.

ERC ratio for PM10/PM2.5 and VOC is 1.2:1

←(from CEMS)→						
Turbine Load MW	Stack Flow dscfh	Stack Flow dscfm	NOx lb/hr	CO lb/hr	NOx lbs	CO lbs
0	0	0	0.0	0.0	0.00	0.00
0	1,800,000	30,000	0.2	37.2	0.00	0.62
0	6,909,000	115,150	2.4	123.3	0.04	2.06
0	9,348,000	155,800	6.3	53.0	0.10	0.88
0	13,009,000	216,817	12.4	39.1	0.21	0.65
4	18,178,000	302,967	22.9	38.3	0.38	0.64
8	25,664,000	427,733	30.3	64.9	0.51	1.08
11	26,064,000	434,400	36.8	68.0	0.61	1.13
18	30,934,000	515,567	53.6	68.7	0.89	1.15
24	30,675,000	511,250	59.9	63.2	1.00	1.05
25	26,088,000	434,800	72.1	36.0	1.20	0.60
31	27,857,000	464,283	99.8	21.6	1.66	0.36
38	29,724,000	495,400	76.2	38.3	1.27	0.64
42	29,581,000	493,017	53.1	99.9	0.89	1.66
49	32,753,000	545,883	52.5	101.1	0.88	1.69
55	34,702,000	578,367	47.1	110.4	0.78	1.84
62	34,554,000	575,900	46.4	74.2	0.77	1.24
67	33,573,000	559,550	46.6	41.9	0.78	0.70
68	31,022,000	517,033	47.4	19.2	0.79	0.32
68	29,841,000	497,350	51.5	9.2	0.86	0.15
68	29,770,000	496,167	50.8	8.8	0.85	0.15
68	29,699,000	494,983	53.3	9.5	0.89	0.16
68	29,532,000	492,200	61.9	7.6	1.03	0.13
68	29,788,000	496,467	68.2	6.7	1.14	0.11
68	29,606,000	493,433	71.4	6.8	1.19	0.11
68	29,822,000	497,033	76.9	6.3	1.28	0.10
68	29,675,000	494,583	78.7	6.7	1.31	0.11
70	30,203,000	503,383	85.3	6.4	1.42	0.11
74	31,920,000	532,000	93.5	6.5	1.56	0.11
79	32,367,000	539,450	104.2	5.8	1.74	0.10
79	30,553,000	509,217	115.3	3.6	1.92	0.06
79	29,589,000	493,150	109.5	2.9	1.82	0.05
79	29,542,000	492,367	105.6	2.9	1.76	0.05
79	29,634,000	493,900	106.0	2.9	1.77	0.05
79	29,553,000	492,550	108.5	2.9	1.81	0.05
79	29,481,000	491,350	111.8	2.9	1.86	0.05
79	29,593,000	493,217	115.8	2.9	1.93	0.05
79	29,529,000	492,150	119.2	2.7	1.99	0.04
79	29,586,000	493,100	118.9	2.9	1.98	0.05
79	29,621,000	493,683	107.0	2.9	1.78	0.05
78	29,597,000	493,283	83.6	2.9	1.39	0.05
78	29,569,000	492,817	25.5	2.9	0.42	0.05
78	29,558,000	492,633	28.1	2.8	0.47	0.05
78	29,534,000	492,233	24.2	2.8	0.40	0.05
78	29,547,000	492,450	18.8	2.9	0.31	0.05

NOx lb/hr	CO lb/hr
52.73	24.02
53.11	20.44
53.99	18.42
62.61	17.57
53.75	16.96
53.73	16.36
53.61	15.32
53.38	14.23
52.67	13.12
52.25	12.11
51.25	11.56
50.18	11.29
49.30	10.65
48.21	9.90
48.31	9.33
47.87	8.54
47.41	7.85
46.90	7.70
46.32	7.43
45.63	6.55
44.92	5.83
44.15	4.31
43.22	4.67
42.16	5.67
41.03	6.33
39.30	6.69
38.20	6.63
37.07	5.27
36.51	6.06
35.77	6.26
31.85	5.20
30.02	6.15
28.26	6.11
26.50	6.06
24.69	5.01
22.82	5.96
20.09	5.91
18.95	5.37
16.95	5.82
15.14	5.77
13.75	5.72
13.32	5.67
12.55	5.63
12.45	5.68

81	31,476,000	524,600	75.6	5.4	1.26	0.09
80	30,016,000	500,267	87.4	3.0	1.46	0.05
80	29,714,000	495,233	96.1	2.3	1.60	0.04
80	29,692,000	494,867	64.5	2.3	1.07	0.04
79	29,868,000	497,800	19.4	2.3	0.32	0.04
79	29,848,000	497,467	16.3	2.3	0.27	0.04
79	29,648,000	494,133	15.6	2.3	0.26	0.04
79	29,761,000	496,017	15.7	2.3	0.26	0.04
79	29,761,000	496,017	15.6	2.3	0.26	0.04
79	29,728,000	495,467	15.4	2.3	0.26	0.04
79	29,775,000	496,250	15.6	2.3	0.26	0.04
79	29,708,000	495,133	15.7	2.3	0.26	0.04
79	29,763,000	496,050	15.9	2.3	0.27	0.04
79	29,755,000	495,917	16.1	2.3	0.27	0.04
79	29,816,000	496,933	16.2	2.3	0.27	0.04
79	29,822,000	497,033	16.2	2.3	0.27	0.04
79	29,694,000	494,900	16.6	2.3	0.28	0.04
79	29,769,000	496,150	17.2	2.3	0.29	0.04
79	29,794,000	496,567	18.2	2.3	0.30	0.04
79	29,727,000	495,450	20.9	2.3	0.35	0.04
79	29,802,000	496,700	24.0	2.3	0.40	0.04
79	29,738,000	495,633	25.5	2.3	0.43	0.04
79	29,696,000	494,933	26.5	2.3	0.44	0.04
78	29,732,000	495,533	27.2	2.3	0.45	0.04
78	29,743,000	495,717	27.7	2.3	0.46	0.04
79	29,741,000	495,683	28.2	2.3	0.47	0.04
78	29,713,000	495,217	23.5	2.3	0.39	0.04
79	29,777,000	496,283	20.2	2.3	0.34	0.04
79	29,835,000	497,250	18.3	2.3	0.30	0.04
78	29,757,000	495,950	18.2	2.3	0.30	0.04
79	29,813,000	496,883	19.6	2.3	0.33	0.04
78	29,727,000	495,450	19.9	2.3	0.33	0.04
78	29,803,000	496,717	20.1	2.3	0.34	0.04
79	29,669,000	494,483	20.7	2.3	0.34	0.04
79	29,769,000	496,150	21.0	2.3	0.35	0.04
79	29,723,000	495,383	21.0	2.3	0.35	0.04
78	29,757,000	495,950	21.2	2.3	0.35	0.04
78	29,701,000	495,017	21.5	2.3	0.36	0.04
78	29,835,000	497,250	21.6	2.3	0.36	0.04
78	29,710,000	495,167	21.7	2.3	0.36	0.04
79	29,624,000	493,733	21.8	2.3	0.36	0.04
78	29,691,000	494,850	21.8	2.3	0.36	0.04
78	29,663,000	494,383	22.0	2.3	0.37	0.04
79	29,835,000	497,250	22.2	2.3	0.37	0.04
78	29,746,000	495,767	22.0	2.3	0.37	0.04
78	29,833,000	497,217	22.1	2.3	0.37	0.04
78	29,755,000	495,917	22.1	2.3	0.37	0.04
78	29,607,000	493,450	21.8	2.3	0.36	0.04
79	29,641,000	494,017	22.0	2.3	0.37	0.04

23,929	6,161
22,775	5,771
20,777	6,081
19,255	7,185
18,233	7,534
17,991	7,871
17,667	7,748
17,451	7,774
17,115	7,776
16,889	7,665
16,663	7,662
16,537	7,659
16,411	7,559
16,384	7,571
16,362	7,600
16,339	7,639
16,322	7,738
16,301	7,888
16,279	7,994
16,241	8,009
16,215	8,209
16,192	8,391
16,169	8,591
16,146	8,483
16,123	8,534
16,100	8,534
16,077	8,555
16,054	8,681
16,031	8,955
16,008	9,110
15,985	9,225
15,962	9,400
15,939	9,567
15,916	9,721
15,893	9,921
15,870	10,121
15,847	10,321
15,824	10,521
15,801	10,721
15,778	10,921
15,755	11,121
15,732	11,321
15,709	11,521
15,686	11,721
15,663	11,921
15,640	12,121
15,617	12,321
15,594	12,521
15,571	12,721
15,548	12,921
15,525	13,121
15,502	13,321
15,479	13,521
15,456	13,721
15,433	13,921
15,410	14,121
15,387	14,321
15,364	14,521
15,341	14,721
15,318	14,921
15,295	15,121
15,272	15,321
15,249	15,521
15,226	15,721
15,203	15,921
15,180	16,121
15,157	16,321
15,134	16,521
15,111	16,721
15,088	16,921
15,065	17,121
15,042	17,321
15,019	17,521
15,000	17,721
14,977	17,921
14,954	18,121
14,931	18,321
14,908	18,521
14,885	18,721
14,862	18,921
14,839	19,121
14,816	19,321
14,793	19,521
14,770	19,721
14,747	19,921
14,724	20,121
14,701	20,321
14,678	20,521
14,655	20,721
14,632	20,921
14,609	21,121
14,586	21,321
14,563	21,521
14,540	21,721
14,517	21,921
14,494	22,121
14,471	22,321
14,448	22,521
14,425	22,721
14,402	22,921
14,379	23,121
14,356	23,321
14,333	23,521
14,310	23,721
14,287	23,921
14,264	24,121
14,241	24,321
14,218	24,521
14,195	24,721
14,172	24,921
14,149	25,121
14,126	25,321
14,103	25,521
14,080	25,721
14,057	25,921
14,034	26,121
14,011	26,321
13,988	26,521
13,965	26,721
13,942	26,921
13,919	27,121
13,896	27,321
13,873	27,521
13,850	27,721
13,827	27,921
13,804	28,121
13,781	28,321
13,758	28,521
13,735	28,721
13,712	28,921
13,689	29,121
13,666	29,321
13,643	29,521
13,620	29,721
13,597	29,921
13,574	30,121
13,551	30,321
13,528	30,521
13,505	30,721
13,482	30,921
13,459	31,121
13,436	31,321
13,413	31,521
13,390	31,721
13,367	31,921
13,344	32,121
13,321	32,321
13,298	32,521
13,275	32,721
13,252	32,921
13,229	33,121
13,206	33,321
13,183	33,521
13,160	33,721
13,137	33,921
13,114	34,121
13,091	34,321
13,068	34,521
13,045	34,721
13,022	34,921
13,000	35,121
12,977	35,321
12,954	35,521
12,931	35,721
12,908	35,921
12,885	36,121
12,862	36,321
12,839	36,521
12,816	36,721
12,793	36,921
12,770	37,121
12,747	37,321
12,724	37,521
12,701	37,721
12,678	37,921
12,655	38,121
12,632	38,321
12,609	38,521
12,586	38,721
12,563	38,921
12,540	39,121
12,517	39,321
12,494	39,521
12,471	39,721
12,448	39,921
12,425	40,121
12,402	40,321
12,379	40,521
12,356	40,721
12,333	40,921
12,310	41,121
12,287	41,321
12,264	41,521
12,241	41,721
12,218	41,921
12,195	42,121
12,172	42,321
12,149	42,521
12,126	42,721
12,103	42,921
12,080	43,121
12,057	43,321
12,034	43,521
12,011	43,721
11,988	43,921
11,965	44,121
11,942	44,321
11,919	44,521
11,896	44,721
11,873	44,921
11,850	45,121
11,827	45,321
11,804	45,521
11,781	45,721
11,758	45,921
11,735	46,121
11,712	46,321
11,689	46,521
11,666	46,721
11,643	46,921
11,620	47,121
11,597	47,321
11,574	47,521
11,551	47,721
11,528	47,921
11,505	48,121
11,482	48,321
11,459	48,521
11,436	48,721
11,413	48,921
11,390	49,121
11,367	49,321
11,344	49,521
11,321	49,721
11,298	49,921
11,275	50,121
11,252	50,321
11,229	50,521
11,206	50,721
11,183	50,921
11,160	51,121
11,137	51,321
11,114	51,521
11,091	51,721
11,068	51,921
11,045	52,121
11,022	52,321
11,000	52,521
10,977	52,721
10,954	52,921
10,931	53,121
10,908	53,321
10,885	53,521
10,862	53,721
10,839	53,921
10,816	54,121
10,793	54,321
10,770	54,521
10,747	54,721
10,724	54,921
10,701	55,121
10,678	55,321
10,655	55,521
10,632	55,721
10,609	55,921
10,586	56,121
10,563	56,321
10,540	56,521
10,517	56,721
10,494	56,921
10,471	57,121
10,448	57,321
10,425	57,521
10,402	57,721
10,379	57,921
10,356	58,121
10,333	58,321
10,310	58,521
10,287	58,721
10,264	58,921
10,241	59,121
10,218	59,321
10,195	59,521
10,172	59,721
10,149	59,921
10,126	60,121
10,103	60,321
10,080	60,521
10,057	60,721
10,034	60,921
10,011	61,121
9,988	61,321
9,965	61,521
9,942	61,721
9,919	61,921
9,896	62,121
9,873	62,321
9,850	62,521
9,827	62,721
9,804	62,921
9,781	63,121
9,758	63,321
9,735	63,521
9,712	63,721
9,689	63,921
9,666	64,121
9,643	64,321
9,620	64,521
9,597	64,721
9,574	64,921
9,551	65,121
9,528	65,321
9,505	65,521
9,482	65,721
9,459	65,921
9,436	66,121
9,413	66,321
9,390	66,521
9,367	66,721
9,344	66,921
9,321	67,121
9,298	67,321
9,275	67,521
9,252	67,



South Coast Air Quality Management District
21865 Copley Drive, P.O. Box 4941, DIAMOND BAR, CA 91765-0941

NOTICE TO COMPLY

11 / 9 / 2010
DATE OF INSPECTION

Facility Name: HARBOR COGENERATION CO, LLC		Facility ID: 156741	Sector: LK
Location Address: 505 PIER B AVENUE		City: WILMINGTON	Zip: 90744
Mailing Address: 505 PIER B AVENUE		City: WILMINGTON	Zip: 90744

This Notice to Comply is being issued to:

- Request additional information needed to determine compliance with clean air requirements.
 Correct a minor violation found during an inspection.

Failure to respond or take corrective action, or providing false statements in response to this Notice to Comply can lead to issuance of a Notice of Violation pursuant to the California Health and Safety Code. The facility cited above is subject to re-inspection at any time to ensure compliance.

YOU ARE HEREBY DIRECTED TO COMPLY WITH:

1	R2004(b)(4)	Submit QICERs prior to the required due date.	12/23/10	12/22/10
2	R2012(c)(2)(A)	Measure all applicable variables for CO and comply with Rule 218.1 (b)(1)(C)(i) and (ii) Full Span Range.	12/23/10	12/22/10
3	R2012(g)(1)	Comply with Rule 202A ch2 (B)(5) and (8) and calculate emissions during startup and shutdown periods using proper methodology per rule.	12/23/10	12/22/10
4	(Continue)	Correct QICERs as needed for the 2012 audit year.		
5	R2004(b)(2)	Calculate and report all sources quarterly emissions including device DIB.	12/23/10	12/22/10

Served To: RON HOFFARD	Served By: GEORGE WU (Certified mail)
Title: PLANT MANAGER	Date Served: 12/9/10
Email Address: hoffardr@southwestgen.com	Phone: 909-396-2533
Phone: 562-495-3140	Fac: 909-396-2608
Email Address: gwu@aqmd.gov	Forms/Applications/Info available at: www.aqmd.gov

Instructions:

- For each minor violation cited above, compliance shall be achieved by the compliance deadline specified for that particular violation.
- Within 5 working days of achieving compliance for each respective violation, the owner/responsible officer of the cited facility must complete and return a signed copy of this Notice to Comply to the South Coast Air Quality Management District at the address listed above.
- Please copy and return this Notice to Comply as many times as necessary to provide the required information. On each copy, include the date on which compliance was achieved. Date, sign, and send all completed copies to the attention of the inspector named above.

I hereby certify that the facility cited in this Notice to Comply has achieved compliance with the requirements listed above.

RON HOFFARD
NAME OF OWNER/RESPONSIBLE OFFICIAL

PLANT MANAGER
TITLE

Ron Hoffard
SIGNATURE

12/22/10
DATE

NOTICE#: **E 00707**

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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

* (1) (1A) (1B) Denotes RECLAIM emission factor
 (3) Denotes RECLAIM concentration limit
 (5) (5A) (5B) Denotes command and control emission limit
 (7) Denotes NSR applicability limit
 (9) See App B for Emission Limits

(2) (2A) (2B) Denotes RECLAIM emission rate
 (4) Denotes BACT emission limit
 (6) Denotes air toxic control rule limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (10) See section J for NESHAP/MACT requirements

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

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL COMBUSTION, INDUSTRIAL					
GENERATOR, LOW PRESSURE STEAM TURBINE GENERATOR, DE LAVAL, ST-802, G-802, 4160 VOLTS, 11.5 MW					
OXIDIZER, CATALYST, CARBON MONOXIDE, WIDTH: 39 FT 5 IN; HEIGHT: 35 FT ; LENGTH: 4 IN A/N: 487077	C2	D1 C3			
SELECTIVE CATALYTIC REDUCTION, HONEYCOMB CATALYST BED, WIDTH: 39 FT 5 IN; HEIGHT: 35 FT ; LENGTH: 2 FT 9 IN WITH AMMONIA INJECTION A/N: 487077	C3	C2 S4		NH3: 20 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	D12.3, D29.1, E73.1, K40.1
STACK A/N: 487075	S4	C3			D82.1
Process 2: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E10			ROG: (9) [RULE 1113, 11-8-1996; RULE 1113, 7-13-2007; RULE 1171, 11-7-2003; RULE 1171, 2-1-2008]	K67.1
RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS	E11				H23.3
RULE 219 EXEMPT EQUIPMENT, HALON UNIT	E13				H23.2
Process 3: EXTERNAL COMBUSTION					

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

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

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process J: EXTERNAL COMBUSTION					
BOILER, STEAM CLEANER, INTRA-FACILITY, DIESEL FUEL, HOTSY, MODEL MODEL 555 SS, PORTABLE, 0.214 MMBTU/HR A/N: 487078	D16		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 20 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SO2: 500 PPMV (5) [RULE 407, 4-2-1982]	B61.1, C1.1, C1.2, D12.4, I296.1, K48.1

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

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

**FACILITY PERMIT TO OPERATE
HARBOR COGENERATION CO, LLC**

SECTION D: DEVICE ID INDEX

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

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

A99.1 The 10 PPM CO emission limit(s) shall not apply during turbine start-up and shutdown periods. Start-up time shall not exceed 120 minutes per start-up. Shutdown time shall not exceed 60 minutes per shutdown. The turbine shall be limited to a maximum of 2 start-ups per day and 2 shutdowns per day. During start-up, the CO emissions shall not exceed 58.9 lb. During shutdown, the CO emissions shall not exceed 29.4 lb. Written records of 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; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

A99.2 The 7.5 PPM NOX emission limit(s) shall not apply during turbine start-up and shutdown periods. Start-up time shall not exceed 120 minutes per start-up. Shutdown time shall not exceed 60 minutes. The turbine shall be limited to a maximum of 2 start-ups per day and 2 shutdowns per day. During start-up, NOx emissions shall not exceed 147.8 lb. During shutdown, NOx emissions shall not exceed 73.9 lb. Written records of 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; RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]

[Devices subject to this condition : D1]

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]

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D1]

B. Material/Fuel Type Limits

B59.1 The operator shall only use the following material(s) in this device :

Natural gas with sulfur compounds, calculated as hydrogen sulfide, no greater than 5.0 ppmv.

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

[Devices subject to this condition : D1]

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

Compound	Logical statement	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 : D16]

C. Throughput or Operating Parameter Limits

C1.1 The operator shall limit the operating time to no more than 80 hour(s) in any one year.

[RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1304(c)-Offset Exemption, 6-14-1996]

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D16]

C1.2 The operator shall limit the fuel usage to no more than 18 gallon(s) per day.

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

[Devices subject to this condition : D16]

D. Monitoring/Testing Requirements

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

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

[Devices subject to this condition : D1]

D12.3 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the gas turbine exhaust measured prior to the inlet of the SCR reactor..

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

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

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : C3]

D12.4 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the the boiler/steam cleaner.

The operator shall calculate emissions from the equipment using the data from the timer along with a fuel rate of 1.55 gal/hr and the Reclaim emission factor on the permit

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

[Devices subject to this condition : D16]

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

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1 and 5.3 or EPA method	1 hour	Outlet

The test shall be conducted at least annually and the District shall be notified of the date and time of the test at least 7 days prior to the test.

The source test shall be submitted to the District no later than 45 days after the source test was conducted

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

[Devices subject to this condition : C3]

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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

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

NOX concentration in ppmv

CO concentration in ppmv

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

Oxygen concentration in percent volume

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 218, 8-7-1981; RULE 218, 5-14-1999]

[Devices subject to this condition : S4]

E. Equipment Operation/Construction Requirements

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

Whenever the gas turbine exhaust measured at the inlet of the SCR reactor is less than 650 degrees Fahrenheit.

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

[Devices subject to this condition : C3]

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

E73.2 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use water injection if any of the following requirement(s) are met:

During start-up periods.

During shutdown periods.

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

[Devices subject to this condition : D1]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
CO	District Rule	218

[RULE 218, 8-7-1981; RULE 218, 5-14-1999]

[Devices subject to this condition : D1]

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Halon	District Rule	1418

[RULE 1418, 9-10-1999]

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : E13]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Refrigerants	District Rule	1415
Refrigerants	40CFR82, SUBPART	F

[RULE 1415, 10-14-1994; 40CFR 82 Subpart F, 5-14-1993]

[Devices subject to this condition : E11]

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Sulfur compounds	District Rule	431.1

[RULE 431.1, 6-12-1998]

[Devices subject to this condition : D1]

I. Administrative

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

- 1296.1 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the annual emissions increase for the first 12 months of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D16]

K. Record Keeping/Reporting

- 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 45 days after the source test was conducted.

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

[Devices subject to this condition : D1, C3]

- K48.1 The operator shall maintain records in a manner approved by the District, to demonstrate compliance with the following condition number(s):

Condition Number C 1- 1

Condition Number C 1- 2

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

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D16]

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

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

[Devices subject to this condition : E10]