

FACILITY PERMIT TO OPERATE

**HARBOR COGENERATION CO
505 PIER B AVE
WILMINGTON, CA 90744**

NOTICE

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

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

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By _____
Carol Coy
Deputy Executive Officer
Engineering & Compliance

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO

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FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO

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					
<p>GAS TURBINE, NATURAL GAS, GENERAL ELECTRIC, MODEL PG7111EA, FRAME 7, WITH STEAM OR WATER INJECTION, 1080 MMBTU/HR WITH A/N:</p> <p>COMPRESSOR, 2000 HP FUEL BOOSTER</p> <p>COMPRESSOR, 1500 HP FUEL BOOSTER</p> <p>GENERATOR, 82.3 MW</p> <p>BOILER, WASTE HEAT RECOVERY, 468,630 POUNDS PER HOUR STEAM, UNFIRED</p>	D1	C2	NOX: MAJOR SOURCE**	<p>CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; CO: 10 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996] ; NOX: 78 PPMV (8) [40CFR 60 Subpart GG,3-6-1981]</p> <p>NOX: 7.5 PPMV (4) [RULE 1303(a)(1)-BACT,5-10-1996] ; PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981] ; PM: 11 LBS/HR (5A) [RULE 475,10-8-1976</p> <p><i>RULE 475,8-7-1978</i>] ; PM: 0.01 GRAINS/SCF (5B) [RULE 475,10-8-1976;<i>RULE 475,8-7-1978</i>] ; SOX: 150 PPMV (8) [40CFR 60 Subpart GG,3-6-1981]</p>	A99.1, A99.2, A327.1, B59.1, D12.1, E73.2, E168.1, E481.1, H23.1, K40.1

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

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

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : INTERNAL COMBUSTION, INDUSTRIAL					
GENERATOR, HIGH PRESSURE STEAM TURBINE GENERATOR, WESTINGHOUSE, ST-801, G-801, 13800 VOLTS, 12.5 MW 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: 308007	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: 308007	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: 430440	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 1113,5-14-1999;RULE 1171,6-13-1997;RULE 1171,10-8-1999]	K67.1

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(9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

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

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS	E11				H23.3
RULE 219 EXEMPT EQUIPMENT, HALON UNIT	E13				H23.2

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(7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

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

**FACILITY PERMIT TO OPERATE
HARBOR COGENERATION CO**

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

SECTION D: DEVICE ID INDEX

Device Index For Section D			
Device ID	Section D Page No.	Process	System
D1	1	1	0
C2	2	1	0
C3	2	1	0
S4	2	1	0
E10	2	2	0
E11	3	2	0
E13	3	2	0

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

FACILITY CONDITIONS

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

- (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
- (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[**RULE 401, 3-2-1984**; RULE 401, 11-9-2001]

F24.1 Accidental release prevention requirements of Section 112(r)(7):

- a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).
- b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[**40CFR 68 - Accidental Release Prevention, 5-24-1996**]

DEVICE CONDITIONS

A. Emission Limits

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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 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). The total start-up and shutdown thermal stabilization period on any operating day shall not exceed two hours..

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

[Devices subject to this condition : D1]

- A99.2 The 7.5 PPM NOX emission limit(s) 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). The total start-up and shutdown thermal stabilization period on any operating day shall not exceed two hours..

[**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**]

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

[Devices subject to this condition : D1]

D. Monitoring/Testing Requirements

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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 in 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)-O set, 5-10-1996**; **RULE 1303(b)(2)-O set, 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**]

[Devices subject to this condition : C3]

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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	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)-O set, 5-10-1996; RULE 1303(b)(2)-O set, 12-6-2002]

[Devices subject to this condition : C3]

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

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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

- 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]

- 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]

- E168.1 The following condition number(s) apply to condition number D29.1.

Condition Number SUGGESTED CHARCONDITION CONDITION PARAMETER NOT SET UP

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

[Devices subject to this condition : D1]

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

E481.1 This device qualifies as an intermittently operated 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.

[RULE 2012, 12-5-2003; RULE 2012, 5-6-2005]

[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]

[Devices subject to this condition : E13]

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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]

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

[Devices subject to this condition : D1, C3]

FACILITY PERMIT TO OPERATE HARBOR COGENERATION CO

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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]