



Lawton Chiles
Governor

Florida Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

March 14, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Bruce Miller
Project Manager, Air Programs
Pasco Cogen Limited
Post Office Box 2562
Tampa, Florida 33601

Dear Mr. Miller:

RE: Amendment to Construction Permit
AC 51-196460 [PSD-FL-177]
Pasco Cogen Limited

The Department has reviewed and accepted the proposed construction permit changes in your January 17, 1994, January 31, 1994 and March 1, 1994 letters. The compliance test indicated that performance and efficiency of the combustion turbines was higher than initially expected. This resulted in higher heat input at ISO conditions to the combustion turbines (CT) which resulted in more heat being provided to the heat recovery steam generators, lower emission rates for permitted pollutants and lower heat input requirements for the Duct Burner (DB). The proposed changes are accepted because they will not result in any increase in annual emissions and will not require any equipment changes. Therefore, the permit specific conditions will be amended as follows:

A. Specific Condition Number;

1. From

Table 1

To

Table 1A

2. The entire condition will be deleted and the remaining specific conditions will be renumbered accordingly.

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6. From

- Maximum heat input shall not exceed 384 MMBtu/hr/CT (gas) or 387 MMBtu/hr/CT (oil) at ISO conditions.
- Duct firing shall be limited to natural gas firing only with a maximum heat input of 225 MMBtu/hr.
- Duct firing shall be limited to 525,000 MMBtu/year/HRSG-duct burner, which is equivalent to 3,500 hours at 150 MMBtu/hour.

To

- Maximum heat input, based on the lower heating value (LHV) while burning gas, shall not exceed 423 MMBtu/hr/CT at 51° F or 403 MMBtu/hr/CT when corrected to ISO conditions. The maximum heat input, based on the LHV while burning distillate fuel oil, shall not exceed 424 MMBtu/hr/CT at 51° or 406 MMBtu/hr/CT when corrected to ISO conditions.
- Duct firing shall be limited to natural gas firing only with a maximum heat input of 90 MMBtu/hr, based on the higher heating value of approximately 1054.5 Btu/cubic feet.
- Duct firing shall be limited to 525,000 MMBtu/year/HRSG-duct burner.

16. From

Combustion control shall be utilized for CO control. Due to the lack of operational experience with the LM6000 and the uncertainty of actual CO emissions, the permittee shall leave a space suitable for future installations of an oxidation catalyst. Once performance testing has been completed, the decision to require an oxidation catalyst will be based on a cost/benefit analysis of using such controls.

To

Combustion control shall be utilized for CO control.

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The permittee shall leave a space suitable for installation of an oxidation catalyst.

20. From

This source shall comply with all requirements of 40 CFR 60, Subparts GG and Db and F.A.C. Rule 17-2.660(2)(a), Standards of Performance for Stationary Gas Turbines and Standards of Performance for Industrial, Commercial, and Institutional Steam Generating Units.

To

This source shall comply with all requirements of 40 CFR 60, subparts GG and Dc and F.A.C. Rule 17-296.800(2)(a), Standard of Performance for Stationary Gas Turbines and Standards of Performance for Small Industrial-Commercial-Industrial Steam Generating units.

B. Attachments to be Incorporated;

- KNB letter received January 18, 1994
- KBN letter received February 1, 1994
- KNB letter received March 1, 1994

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an

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administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

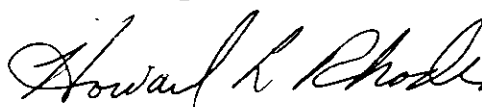
- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

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This letter amendment must be attached to Construction Permit No. AC 51-196460 (PSD-FL-177), and shall become part of the permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/CSL

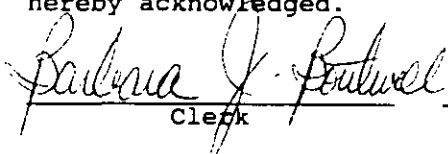
Attachment

cc: J. Kissel, SWD
J. Harper, EPA
J. Bunyak, NPS
K. Kosky, KBN

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 3/18/94 to the listed persons.

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to 120.52(11),
Florida Statutes, with the designated
Department Clerk, receipt of which is
hereby acknowledged.

 3/18/94
Clerk Date

Attachment

A. Specific Condition No. 1

FROM:

Table 1. Allowable Emission Limits Combined Cycle Combustion Turbine Cogeneration Facility

Pollutant	Source ^a	Fuel ^b	Basis of Limit	Allowable Emission Limits	
				lbs/hr	tons/year
NOx	CT	NG	BACT: 25 ppmvd at 15% O ₂	78.8	404.7
	CT	DFO	BACT: 42 ppmvd at 15% O ₂	137.0	
	DB	NG	BACT: 0.1 lb/MMBtu	45.0	
CO	CT	NG	BACT: 42 ppmvd	80.6*	466.5*
	CT	DFO	BACT: 78 ppmvd	151.0*	
	DB	NG	BACT: 0.2 lb/MMBtu	90.0*	
PM/PM ₁₀	CT	NG	BACT: 0.0065 lb/MMBtu	5.0	27.0
	CT	DFO	BACT: 0.026 lb/MMBtu	20.0	
	DB	NG	BACT: 0.006 lb/MMBtu	2.6	
SO ₂	CT	DFO	Established by Applicant 0.1% S	80.0	21.0
VOC	CT	NG	Established by Applicant	3.3	30.8
	CT	DFO	Established by Applicant	8.3	
	DB	NG	Established by Applicant	13.5	
Mercury (Hg)	CT	DFO	Established by Applicant	--	0.0003
Lead (Pb)	CT	DFO	Established by Applicant	--	0.0008
Beryllium (Be)	CT	DFO	Established by Applicant	--	0.0002
Sulfuric Acid Mist	CT	DFO	Established by Applicant	--	0.8

^a CT = combustion turbine

DB = duct burner

^b NG = natural gas

DFO = distillate fuel oil

* Emission limit for CO subject to change should additional control (oxidation catalyst) be required.

TO: NEW

Table 1A. Pasco Cogen Limited Allowable Emission Limits

Pollutant	Source ^a	Fuel ^b	Basis of Limit	Allowable Emission Limits			
				@ 59°F		Maximum Allowable @ 51°F ^f	
				lbs/hr	TPY	lbs/hr ^d	TPY ^e
NO _x ^c	CT	NG	BACT: 25 ppmvd at 15% O ₂	82.7	393.6	85.5	404.7
	CT	DFO	BACT: 42 ppmvd at 15% O ₂	143.9		148.3	
	DB	NG	BACT: 0.1 lb/MMBtu	18.0		18.0	
	CT&DB	NG		100.7		103.5	
CO	CT	NG	BACT: 42 ppmvd	54.6	350.3	56.0	350.3
	CT	DFO	BACT: 78 ppmvd	33.0		34.5	
	DB	NG	BACT: 0.2 lb/MMBtu	36.0		36.0	
	CT&DB	NG		90.6		92.0	
PM/PM ₁₀	CT	NG	BACT: 0.0065 lb/MMBtu	5.0	27.0	5.0	27.0
	CT	DFO	BACT: 0.026 lb/MMBtu	20.0		20.0	
	DB	NG	BACT: 0.006 lb/MMBtu	2.6		2.6	
	CT&DB	NG		7.6		7.6	
SO ₂	CT	DFO	Estab. by Applicant 0.1% S	80.0	21.0	87.6	21.0
VOC	CT	NG	Established by Applicant	3.3	30.8	3.4	30.8
	CT	DFO	Established by Applicant	8.3		8.7	
	DB	NG	Established by Applicant	5.4		5.4	
	CT&DB	NG		8.7		8.8	
Mercury(Hg)	CT	DFO	Established by Applicant	--	0.0003	--	0.0003
Lead(Pb)	CT	DFO	Established by Applicant	--	0.0008	--	0.0008
Beryllium(Be)	CT	DFO	Established by Applicant	--	0.0002	--	0.0002
Sulfuric Acid Mist	CT	DFO	Established by Applicant	--	0.80	--	0.80

^a CT = 2 combustion turbines, DB = 2 duct burners

^b NG = natural gas, DFO = distillate fuel oil

^c NO_x limits for 59° are at 60% relative humidity (ISO conditions)

^d Compliance with the Maximum Allowable Emission Limits shall be demonstrated for CT limits and CT&DB limits.

^e The Maximum Allowable TPY of emissions, based on a worst case senario, are the sum of the CT emissions while firing NG for 355 days, the CT emissions while firing DFO for 10 days, and DB emissions at the maximum heat input for the previous combinations of CT firing. The DB will only fire NG and only while the CT is firing NG.

^f These are the Maximum Allowable Emission Limits shall never be exceeded at any temperature and/or operating configuration.

Note: All temperatures cited in this table refer to turbine inlet temperatures.

Memorandum

Florida Department of
Environmental Protection

CLAIR
RECEIVED

To : Howard Rhodes

From : Clair Fancy *CF*

Date : March 14, 1994

MAR 17 1994

Bureau of
Air Regulation

Subject: Approval of Construction Permit Amendment
AC 51-196460 (PSD-FL-177)
Pasco Cogen Limited

Attached for your approval and signature is an amendment to a construction permit prepared by the Bureau of Air Regulation for the Pasco Cogen Limited Facility. The purpose of this amendment is to specify performance criteria and allowable emission limits based on actual performance, which was not available when the permit was written. This amendment will not cause an increase in annual allowable emission limits or result in any equipment change.

This amendment is recommended for your approval and signature.

CF/CSL

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Bruce Miller
Project Manager, Air Programs
Pasco Cogen Limited
Post Office Box 2562
Tampa, Florida 33601

4a. Article Number

P 872 563 617

4b. Service Type

- ☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

MAR 22 1994

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991

★U.S. GPO: 1992-323-402

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

P 872 563 617



Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to Mr. Bruce Miller	
Street and No. Post Office Box 2562	
P.O., State and ZIP Code Tampa, Florida 33601	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 3/18/94 AC 51-196460	

PS Form 3800, JUNE 1991