

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT**

In the Matter of an
Application for Permit by:

Lake Worth Generation, L.L.C.
245 Winter Street, Suite 300
Waltham, MA 02451


Authorized Representative:
Brian Chatlosh, Manager

Permit No. PSD-FL-266A
Project No. 0990568-002-AC
Modification of VOC Emission Standards
Lake Worth Generation Plant
Palm Beach County, Florida

Enclosed is final PSD Permit No. PSD-FL-266A for Project No. 0990568-002-AC. This permit authorizes a slight increase in VOC emissions for the recently permitted combined cycle unit under construction at the Lake Worth Generation Plant located at 117 College Street in Lake Worth, Palm Beach County, Florida. As noted in the Final Determination (attached), the Department made only minor changes to the draft permit. The final permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.


C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

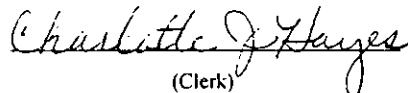
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 8/30/00 to the persons listed:

Mr. Brian Chatlosh, Manager*
Mr. Paul Doherty, LWG
Mr. Ken Kosky, Golder Associates
Mr. Buck Oven, PPSO

Mr. Jim Stormer, PBCHD
Mr. Isidore Goldman, SED
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

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


(Clerk)

8/30/00
(Date)

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Brian Chatlosh, Mgr.

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

8/29/00
 Lake Worth Gen.
 Postmark
 Here

Name (Please Print Clearly) (to be completed by mailer)

Brian Chatlosh, Mgr.

Street, Apt. No., or PO Box No

245 Winter St., Ste. 300

City, State, ZIP+4

Waltham, MA 02451

PS Form 3800, July 1999

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Brian Chatlosh, Manager
 Lake Worth Generation, L.L.C.
 245 Winter St., Ste 300
 Waltham, MA 02451

2. Article Number (Copy from service label)

7099 3400 0000 1453 2542

PS Form 3811, July 1999

Domestic Return Receipt

102595-99-M-1789

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

9/5/00

C. Signature

x R. Perreville

☐ Agent
☐ Addressee

D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

FINAL DETERMINATION
Lake Worth Generation, L.L.C. – VOC Modification
Palm Beach County

PROJECT DESCRIPTION

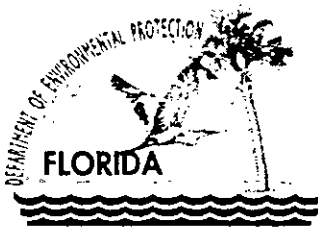
The Department distributed a public notice package on July 21, 2000 to Lake Worth Generation, L.L.C. for a recently permitted combined cycle plant under construction at 117 College Street in Lake Worth, Palm Beach County, Florida. The applicant requested a permit modification authorizing an increase in the VOC emission standards for combined cycle operation of Emissions Unit 001. The requested change will result in a net VOC emissions increase of 3.8 tons per year, which brings total VOC emissions from the new plant to 20.1 tons per year. Therefore, VOC emissions from this modification, as well as the original project, remain below the significant emission rate of 40 tons per year and a BACT determination is not required. The requested change does not alter any of the ambient impacts modeled in the original Air Quality Analysis. The Public Notice of Intent to Issue Permit was published in The Palm Beach Post on July 28, 2000. The Department received the proof of publication on August 7, 2000.

COMMENTS

The Department received no adverse comments from the public, the Palm Beach County Health Department, the Department's Southeast District Office, EPA Region 4, or the National Park Service.

CONCLUSION

The final action of the Department is to issue the final permit with the changes mentioned above and to correct minor typographical errors. Only pages 1, 3, and 14 of original permit No. PSD-FL-266 were revised.



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

PERMITTEE

Lake Worth Generation, L.L.C.
245 Winter Street, Suite 300
Waltham, MA 02451

Authorized Representative:

Brian Chatlosh, Manager

ARMS ID No.	099-0568
PSD Permit No.	PSD-FL-266
ARMS Permit No.	099-0568-001-AC
Permit Expires:	May 1, 2001
SIC No.	4911

PROJECT AND LOCATION

This permit authorizes Lake Worth Generation, L.L.C. to construct a gas-fired combustion turbine with electrical generator set and associated equipment in accordance with the application and conditions of this permit. The new electrical generating power plant will be located within the boundaries of the existing Tom G. Smith Power Plant (owned and operated by the City of Lake Worth) at 117 College Street in Lake Worth, Florida 33461. The UTM Coordinates are Zone 17, 592.8 km E, 43.7 km N.

MODIFICATION

Project No. 0990568-002-AC (PSD-FL-266A) revised Permit PSD-FL-266 to authorize an increase in the VOC standard for combined emissions from the gas turbine and duct burner on page 14.

STATEMENT OF BASIS

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to construct the emissions units in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

APPENDICES

The attached appendices are a part of this permit:

- Appendix A: Terminology
- Appendix B: Construction Permit General Conditions
- Appendix C: Department's BACT Determination
- Appendix D: NSPS General Provisions
- Appendix E: NSPS Subpart Db (HRSG Duct Burner)
- Appendix F: NSPS Subpart GG (Gas Turbine)
- Appendix G: Summary Report - Gaseous Excess Emission & Monitoring System Performance

Howard L. Rhodes, Director
Division of Air Resources Management

8/29/00

(Revision Date)

"More Protection, Less Process"

Printed on recycled paper.

SECTION I. FACILITY INFORMATION

09/20/99	Distributed revised Intent to Issue Draft PSD Permit package.
09/24/99	Public Notice of Intent to Issue Permit published in the Palm Beach Post.
10/20/99	Received comments from the applicant requesting minor changes.
10/22/99	Received comments from EPA Region 4 requesting substantial changes, primarily to the NOx BACT determination.
10/28/99	Teleconference with EPA, the applicant, and the Department.
11/01/99	Teleconference with EPA Region 4 and the Department.

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit and are on file with the Department. They specifically relate to this permitting action.

- Permit application received 03/15/99 and associated correspondence.
- National Park Service's comments dated 04/16/99 and 06/21/99.
- Department's initial Intent to Issue Draft Permit package dated 07/09/99.
- Letter dated 07/23/99 from the City of Lake Worth requesting consideration of retiring the boilers coupled with steam-electrical generating units S-1, S-2 and S-4 and limiting operation of the boiler coupled with steam unit S-3 to only those periods when steam is not available from LWG.
- Written request received 08/09/99 from the applicant to modify the initial Intent to Issue Draft Permit package.
- Letter received 08/19/99 from the City of Lake Worth requesting consideration of the repowering nature of this project along with the site-specific conditions related to an ammonia release in the vicinity of this plant.
- Final written comments received 08/20/99 from the Palm Beach County Local Air Program regarding the initial Intent to Issue Draft Permit package.
- Department's revised Intent to Issue and Public Notice Package dated 09/20/99.
- Department's Final Determination and Best Available Control Technology Determination issued concurrently with this Final Permit.
- Project No. 0990568-002-AC (PSD-FL-266A) revised the VOC emission standards for the combined emissions from the gas turbine and duct burner.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

EMISSIONS UNITS 001/002. COMBUSTION TURBINE AND HRSG DUCT BURNER

- Operation of steam-electrical generator units S-1 and S-2 is prohibited.
- Operation of each boiler coupled with steam-electrical generator units S-1, S-2, and S-4 is prohibited.
- The boiler coupled with steam-electrical generator unit S-3 shall only be fired when steam is not available for purchase from the Lake Worth Generation Plant. Operation of the boiler for Unit S-3 may include periods of startup, shutdown and malfunction of the combustion turbine or heat recovery steam generator at the Lake Worth Generation Plant.

Prior to the City of Lake Worth obtaining the final Title V permit containing these conditions, operation in any of the alternate methods of operation is prohibited. [Applicant Request and Rule 62-4.070(3), F.A.C.]

19. Alternate Methods of Operation: Once specific condition #18 of this permit has been satisfied, the following limited alternate methods of operation are authorized when firing natural gas in the combined cycle mode: steam injection for power augmentation *or* firing the supplemental HRSG duct burner *or* both. The specific conditions of this permit effectively limit the alternate methods of operation to a total of 2000 hours per year. Emissions from these units shall not exceed the following standards during these alternate methods of operation. [Rules 62-212.400 (BACT) and 62-4.070(3), F.A.C.]

Natural Gas Firing, Combined Cycle Operation, Alternate Methods of Operation

Pollutant	Operation/Controls ⁶	Emission Standard
<i>EU-001/002: Combustion Turbine With Power Augmentation Or HRSG Duct Firing Or Both</i>		
CO ¹	CC / DLN PA or DF or Both	15.0 ppmvd corrected to 15% O ₂ based on a 24-hour rolling average (24-hour average is equivalent to 54.0 pounds per hour) 20.0 ppmvd corrected to 15% O ₂ based on a 3-hour rolling average 72.0 pounds per hour based on a 3-hour test average
NOx ²	CC / DLN PA or DF or Both	9.4 ppmvd corrected to 15% O ₂ based on a 24-hour rolling average (24-hour average is equivalent to 74.7 pounds per hour) 12.0 ppmvd corrected to 15% O ₂ based on a 3-hour rolling average 88.0 pounds per hour based on a 3-hour test average
PM/PM ₁₀ ³	CC / CF / CD	Visible emissions shall not exceed 10% opacity (< 0.01 grains/dscf)
SAM/SO ₂ ⁴	CC / CF / CD	1 grain per 100 SCF of gas (fuel specification requirement)
VOC ⁵	CC / CD	3.3 ppmvw (as methane) based on a 3-hour test average 7.6 pounds per hour (as methane) based on a 3-hour test average {Permitting Note: Revised by Project No. 0990568-002-AC (PSD-FL-266A).}
<i>EU-002: Emissions From Duct Burner Only, Gas Firing</i>		
NOx ⁷	CC / DLN / DF	0.08 pounds per mmBTU of heat input from duct firing only

¹ Compliance with the 3-hour and 24-hour rolling CO standards shall be demonstrated by data collected from the certified continuous emissions monitoring system (CEMS) required by this permit. The CEMS shall calculate and record emissions for each 1-hour block of operation and maintain rolling 3-hour and 24-hour averages. Compliance with the 3-hour test average shall be determined by EPA Method 10 and results reported in units of ppmvd @ 15% O₂ and pounds per hour.

Florida Department of Environmental Protection

Memorandum

TO: Howard L. Rhodes *CHX*
THRU: Clair Fancy *CLF*
Al Linero *AL* 8/28
FROM: Jeff Koerner *JK*
DATE: August 28, 2000
SUBJECT: Project No. 0990568-002-AC (PSD Permit No. PSD-FL-266A)
Lake Worth Generation, L.L.C.
Modification of Combined Cycle VOC Emission Standards

The Final Permit is attached for your approval and signature for a project that will allow a slight increase in the VOC emission standards for a previously permitted combined cycle gas turbine. On November 4, 1999, the Department issued a PSD permit to Lake Worth Generation, L.L.C. to construct a new combined cycle plant located at 117 College Street in Lake Worth, Florida. The final design specification for the duct burner system indicates that the VOC emissions will be higher than previously expected. The proposed change will result in a net VOC emissions increase of 3.8 tons per year, which brings total VOC emissions from the new plant to 20.1 tons per year. Therefore, VOC emissions from the modification, as well as the original project, remain below the significant emission rate of 40 tons per year and a BACT determination is not required. The proposed change would not alter any of the ambient impacts modeled in the original Air Quality Analysis. I believe the request is reasonable and have revised pages 1, 3, and 14 of the permit as requested.

The Public Notice of Intent to Issue Permit was published in The Palm Beach Post on July 28, 2000. The Department received the proof of publication on August 7, 2000. No adverse comments were received from the public, the Palm Beach County Health Department, the Department's Southeast District Office, EPA Region 4, or the National Park Service regarding the Draft Permit. A more detailed description of the modification is provided in the attached Final Determination.

I recommend your approval and signature. Day 90 is October 12, 2000.

Attachments

CHF/AAL/jfk