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

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)

(Date)

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 <u>Public Notice of Intent to Issue Permit</u> 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**

leb 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. PSD Permit No. PSD-FL-266

099-0568

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

(Revision Date)

"More Protection, Less Process"

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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. <u>Alternate Methods of Operation</u>: 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 |
|--|---------------------------------|---|
| EU-001/002: Combustion Turbine With Power Augmentation Or HRSG Duct Firing Or Both | | |
| CO1 | CC / DLN | 15.0 ppmvd corrected to 15% O2 based on a 24-hour rolling average |
| | PA or DF or Both | (24-hour average is equivalent to 54.0 pounds per hour) |
| | | 20.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average |
| | | 72.0 pounds per hour based on a 3-hour test average |
| NOx² | CC / DLN | 9.4 ppmvd corrected to 15% O2 based on a 24-hour rolling average |
| | PA or DF or Both | (24-hour average is equivalent to 74.7 pounds per hour) |
| | | 12.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average |
| | | 88.0 pounds per hour based on a 3-hour test average |
| PM/PM10 ³ | CC / CF / CD | Visible emissions shall not exceed 10% opacity (< 0.01 grains/dscf) |
| SAM/SO2 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).} |
| EU-002: Em | issions From Duct Burne | er Only, Gas Firing |
| NOx ⁷ | CC / DLN / DF | 0.08 pounds per mmBTU of heat input from duct firing only |

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

TO:

Howard L. Rhodes

THRU:

Clair Fancy

Al Linero Gay

FROM:

Jeff Koerner

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 <u>Public Notice of Intent to Issue Permit</u> 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



Department of Environmental Protection

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

David B. Struhs Secretary

P.E. CERTIFICATION STATEMENT

PERMITTEE

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

Authorized Representative: Brian Chatlosh, Manager

ARMS Permit No. 0990568-002-AC PSD Permit No. PSD-FL-266A Facility ID No. 0990568

SIC No. 4911

PROJECT DESCRIPTION

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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application. The applicant requests increasing the VOC standards from 1.7 ppmvw and 3.8 pounds per hour to 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners.

VOC emissions from the original project were below the significant emission rate of 40 tons per year, so a BACT determination was not required. The proposed change will result in a net emissions increase of 3.8 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which continues to remain well below the significant emissions rate. Therefore, PSD does not apply and a determination of Best Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled scenarios 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.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of mis area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

Jeffery F. Koerner, P.E.

Registration Number: 49441

DARM - New Source Review Section Florida Department of Environmental Protection

"More Protection, Less Process"

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Date

Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL 32653-1500 Telephone (352) 336-5600 Fax (352) 336-6603



RECEIVED

9937586

AUG 07 2000

BUREAU OF AIR REGULATION

August 4, 2000

Mr. C.H. Fancy, P.E. Chief, Bureau of Air Regulation Department of Environmental Protection 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida 32301

Re:

Lake Worth Generation

Proof of Public Notice

Project No. 0990568-002-AC (PSD-FL-266A) Modification of VOC Standards for Duct Firing

Dear Mr. Fancy:

Golder Associates Inc. on behalf of Lake Worth Generation L.L.C. is transmitting herein the official notarized proof of Public Notice of Intent to Issue Air Construction Permit Modification as required by Section 403.815, and 403.0815 F.S.DEP Rules 62-110.106(7)(a), F.A.C. for your files.

Sincerely,

GOLDER ASSOCIATES INC.

Benny Susi, P.E.

Associate

Enclosure: Proof of Public Notice

cc:

K. Kosky, GAI-Gainesville

B. Chatlosh, LWG, L.L.C.

P. Doherty, LWG, L.L.C

R. Zwolak, GAI-Tampa

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P.B.Co. EPA

THE PALM BEACH POST

Published Daily and Sunday West Palm Beach, Palm Beach County, Florida

PROOF OF PUBLICATION

STATE OF FLORIDA COUNTY OF PALM BEACH

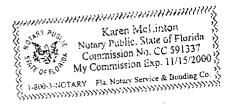
Before the undersigned authority personally appeared Tyler Dixon who on oath says that she is Classified Advertising Manager, Inside Sales of The Palm Beach Post, a daily and Sunday newspaper published at West Palm Beach in Palm Beach County, Florida; that the attached copy of advertising, being a Notice in the matter of Intent to Issue Air Construction Permit Modification -- in the Court, was published in said newspaper in the issues of July 28, 2000.

Affiant further says that the said The Post is a newspaper published at West Palm Beach, in said Palm Beach County, Florida, and that the said newspaper has heretofore been continuously published in said Palm Beach County, Florida, daily and Sunday and has been entered as second class mail matter at the post office in West Palm Beach, in said Palm Beach County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she/he has neither paid nor promised any person, firm or corporation any discount rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before this 28 day of July A.D. 2000.

Personally known XX or Produced Identification

Type of Identification Produced



NO. 719954
PUBLIC NOTICE OF INTENT
TO ISSUE AIR CONSTRUCTION
PERMIT MODIFICATION STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL

PROTECTION

PROTECTION
Project No. 0990568-002-AC

(PSD-FL-266A)
Lake Worth Generation, L.L.C.
Modification of Duct Burner
VOC Emissions
Palm Baach County
The Department of Environmental Protection (Department) gives notice of its intent
to issue an air construction
permit modification to Lake
Worth Generation, L.L.C. The
applicant requests that the applicant requests that the current VOC standards of 1.7 ppmvw and 3.8 pounds per hour be increased to 3.3 ppmvw and 7.6 pounds per flour for the combined emis-sions from the gas turbine and duct burners. The applicant's mailing address is Lake Worth Generation, L.L.C., 245 Winter Street, Suite 300, Waitham, MA 02451. The authorized representative is Brian Chat-losh, Manager. On November 4, 1999, the De-

pertment Issued an Initial PSD permit to Lake Worth Genera-tion, L.L.C. to construct a new combined cycle plant located at 117 College Street in Lake Worth, Florida. The project consists of a 170 MW combus-tion turbine with electrical generator set, a heet recovery ateam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equip-ment, and two exhaust stacks. ment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per ment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial

The Department believes the request is reasonable and has revised pages 1, 3 and 14 of the permit accordingly. The proposed change will result in a net emissions increase of 4.4 tons per year bringing to-tal VOC emissions from the project to 20.1 tons per yeer, which continues to remain well below the VOC significant emissions rate of 40 tons per year. Therefore, PSD does not apply and a determination of Best Available Control Tech-nology is not required in ac-cordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled sce-narios of the original Air Quali-

ty Analysis.
The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures re-sults in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for public meet-ings concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of this Public Notice. Written com-ments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall re-vise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures tor petitioning for a hearing are

Mediation is not available in

Mediation is not available in this proceeding.

A person whose substantial interests "are "affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filled (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filled within fourteen (14) days of receipt of this notice of intent, Petitions filed by any persons other teen (14) days of receipt of this notice of intent. Petitions filed by any persons other than fhose entitled to written notice under eection 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of Intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitionar shall mall a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to Intervene in this procaeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the

In compliance with Rule 28106.205 of the Florida AdminIstrative Code.
A potition that disputes the
material facts on which the
Department's action is basad
must contain the following information: (a) The name and
address of each agency affected and each agency's file
or identification number, if
known: (b) The name, eddress, and telephone number
of the patitioner, the name,
address, and telephone number
of the petitioner's representative, if any, which shall
be the address for service
purposes during the course of
the proceeding; and an explanation of how the petitioner's
substantial interests will be affected by the agency determination; (c) A statement of how
and when petitioner received
notice of the agency action or and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of meterial fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific ment of the utilimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of that agency's proposed action; and (g) A statement of the reliaf sought by the patitioner, stating precisely the action petitioner wishes the agency to take with respect to that agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency ac-

tion, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:
Dept. of Environmental Protection
Buraau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tailahassee, Fiorida, 32301 Telephone: 850/488-0114
Dept. of Environmental Protection Southeast District tection Southeast District
400 North Congress Avenue
West Palm Beach,
Florida 33401
Talephone: 561/681-6600
Air Pollution Control Section
Palm Beach County
Health Department
901 Evernia Street
West Palm Beach,
Florida 33401
Telephone: 561/355-3070
The complete project file in Telephone: 561/355-3070
The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111. F.S. Interested parsons may contact the project engineer, Jeff Koerner, at 111 South Magnolia Drive, Sulte 4, Tallahassee, Florida 32301, or call 850/488-0114 for edditional information. information.
PUB: The Palm Beach Post July 28, 2000

Memorandum

Florida Department of Environmental Protection

TO:

Clair Fancy, Chief - Bureau of Air Regulation

THROUGH

Al Linero, Administrator - New Source Review Section

FROM:

Jeff Koerner, Project Engineer - New Source Review Section

DATE:

July 12, 2000

SUBJECT:

Project No. 0990568-002-AC (PSD-FL-266A)

Modification to Increase Duct Burner VOC Emissions

Lake Worth Generation, L.L.C.

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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application. The applicant requests increasing the VOC standards from 1.7 ppmvw and 3.8 pounds per hour to 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners.

VOC emissions from the original project were below the significant emission rate of 40 tons per year, so a BACT determination was not required. The proposed change will result in a net emissions increase of 3.8 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which continues to remain well below the significant emissions rate. Therefore, PSD does not apply and a determination of Best Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled scenarios 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.

Day #74 of the 90-day permitting time clock is September 2, 2000. I recommend your approval of the attached Intent to Issue package for this project.

JFK Attachments

Z 031 392 033

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

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|-----------------------|--|------------------------|--|--|
| | Sent to Mr. Brian Cha | tlosh | | |
| | Street & Number 245 Winter St | ., Stuie 300 | | |
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| | Postage | \$ | | |
| | Certified Fee | | | |
| | Special Delivery Fee | | | |
| 2 | Restricted Delivery Fee | | | |
| 199 | Return Receipt Showing to Whom & Date Delivered | | | |
| April | Return Receipt Showing to Whom, Date, & Addressee's Address | | | |
| Form 3800, April 1995 | TOTAL Postage & Fees | \$ | | |
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| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|--|
| 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. | A. Received by (Please Print Clearly) B. Date of Delivery 705/00 C. Signature X |
| Article Addressed to: | D. Is delivery address different from item 1? Yes |
| Mr. Brian Chatlosh Manager Lake Worth Generation, L.L.C. 245 Winter Street, Ste. 300 Waltham, MA 02451 | If YES, enter delivery address below: No |
| FIA 02451 | 3. Service Type ☐ Certified Mail ☐ Registered ☐ Registered ☐ Insured Mail ☐ C.O.D. |
| 2 Article Number (O | 4. Restricted Delivery? (Extra Fee) ☐ Yes |
| Article Number (Copy from service label) Z 031 392 033 | |
| PS Form 3811, July 1999 Domestic Pet | The December of the Control of the C |



Department of Environmental Protection

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

David B. Struhs Secretary

July 21, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Brian Chatlosh, Manager Lake Worth Generation, L.L.C. 245 Winter Street, Suite 300 Waltham, MA 02451

Re:

Project No. 0990568-002-AC (PSD-FL-266A) Modification of VOC Standards for Duct Firing

Lake Worth Generation, L.L.C.

Dear Mr. Chatlosh:

Enclosed is one copy of the <u>Draft Air Construction Permit Modification</u> for the new Lake Worth Generation Plant to be located at 117 College Street in Lake Worth, Florida. This is a revision of original Permit No. PSD-FL-266 issued on November 4, 1999. The following revised documents are also included: <u>Intent to Issue Air Construction Permit Modification</u>, <u>Technical Evaluation and Preliminary Determination</u>, and the <u>Public Notice of Intent to Issue Air Construction Permit</u>.

The <u>Public Notice</u> must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to the project engineer, Jeff Koerner of the New Source Review Section, at the above letterhead address. If you have any other questions, please contact Mr. Koerner at 850/414-7268.

Sincerely,

C. H. Fancy, P.E., Chief,

Bureau of Air Regulation

CHF/jfk

Enclosures

In the Matter of an Application for Permit by:

Mr. Brian Chatlosh, Manager Lake Worth Generation, L.L.C. 245 Winter Street, Suite 300 Waltham, MA 02451 Project No. 0990568-002-AC PSD Permit No. PSD-FL-266A Duct Burner VOC Modification Palm Beach County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

For the reasons stated below, the Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification (copy attached) for the proposed project as detailed in the application and the enclosed Technical Evaluation and Preliminary Determination,

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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application.

The applicant requests revised VOC standards of 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. The Department believes the request is reasonable and has revised pages 1, 3, and 14 of the permit accordingly. The proposed change will result in a net emissions increase of 4.4 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which remains well below the significant emissions rate.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required to construct the proposed project.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit Modification. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of Public Notice of Intent to Issue Air Permit Modification. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

Lake Worth Generation, L.L.C.
Project No. 0990568-002-AC (PSD-FL-266A)
Duct Burner VOC Modification
Page 2 of 3

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

Lake Worth Generation, L.L.C. Project No. 0990568-002-AC (PSD-FL-266A) **Duct Burner VOC Modification** Page 3 of 3

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit Modification (including the Public Notice of Intent to Issue Air Construction Permit Modification, Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 7/21/00 to the persons listed:

Mr. Brian Chatlosh, LWG*

Mr. Paul Doherty, Thermo ECOtek

Mr. Ken Kosky, Golder Associates

Mr. Jim Stormer, PBCHD

Mr. Isidore Goldman, DEP-SED

Mr. Gregg Worley, EPA

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.

Charlette Hayes 7/21/00 (Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Project No. 0990568-002-AC (PSD-FL-266A)

Lake Worth Generation, L.L.C.

Modification of Duct Burner VOC Emissions

Palm Beach County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Lake Worth Generation, L.L.C. The applicant requests that the current VOC standards of 1.7 ppmvw and 3.8 pounds per hour be increased to 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. The applicant's mailing address is Lake Worth Generation, L.L.C., 245 Winter Street, Suite 300, Waltham, MA 02451. The authorized representative is Brian Chatlosh, Manager.

On November 4, 1999, the Department issued an initial 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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application.

The Department believes the request is reasonable and has revised pages 1, 3 and 14 of the permit accordingly. The proposed change will result in a net emissions increase of 4.4 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which continues to remain well below the VOC significant emissions rate of 40 tons per year. Therefore, PSD does not apply and a determination of Best Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled scenarios of the original Air Quality Analysis.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of this Public Notice. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 850/488-0114 Dept. of Environmental Protection Southeast District 400 North Congress Avenue West Palm Beach, Florida 33401 Telephone: 561/681-6600 Air Pollution Control Section
Palm Beach County Health Department
901 Evernia Street
West Palm Beach, Florida 33401
Telephone: 561/355-3070

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the project engineer, Jeff Koerner, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114 for additional information.

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

LAKE WORTH GENERATION, L.L.C.

Modification of VOC Emissions Standards For Emission Units 001 and 002 Lake Worth, Palm Beach County, Florida

Facility I.D. No. 0990568

Project No. 0990568-002-AC Permit No. PSD-FL-266A

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section

July 21, 2000

1.0 APPLICATION INFORMATION

1.1 Applicant Name and Address

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

Authorized Representative:
Brian Chatlosh, Manager

1.2 Reviewing and Process Schedule

06/21/00: Department received application; complete

2.0 FACILITY INFORMATION

2.1 Facility Description

The new 186 MW combined cycle combustion turbine will be located at 117 College Street in Lake Worth, Florida 33461, within the boundaries of the existing Tom G. Smith Power Plant, which is owned and operated by the City of Lake Worth. This site is approximately 104 km north of the Everglades National Park, a Class I PSD Area. The UTM Coordinates are Zone 17, 592.8 km E, 43.7 km N.

2.2 Standard Industrial Classification Codes (SIC)

| Industry Group No. | 49 | Electric, Gas, and Sanitary Services |
|--------------------|------|--------------------------------------|
| Industry No. | 4911 | Electric Services |

2.3 Regulatory Categories

Power Plant Siting: The new facility is not regulated pursuant to the Electric Power Plant and Transmission Line Siting Act because less than 75 MW of steam-generated electrical power will be produced by this project. Therefore it is not subject to requirements of Chapter 403, Part II, F.S. or Chapter 62-17, F.A.C.

Title III – HAP: A case-by-case determination of Maximum Available Control Technology (MACT) in accordance with Section 112(g) does not apply because the new facility is not expected to be a major source of hazardous air pollutants.

Title IV - Acid Rain: The gas turbine is subject to Title IV, the federal Acid Rain program.

Title V – Major Source: The new facility is classified as a Title V major source of air pollution because emissions of at least one regulated air pollutant, such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

PSD Major Source: The new facility is classified as a fossil fuel-fired steam electric plant, which is one of the source categories listed in Table 62-212.400-2, F.A.C. Because emissions of at least one pollutant exceed 100 tons per year, the existing facility is considered a major source of air pollution with respect to PSD. Therefore, new projects must be reviewed for PSD applicability. Each potential emission increase greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a determination of Best Available Control Technology (BACT). The original PSD permit contains BACT determinations for CO, NOx, PM/PM10, SAM/SO2 emissions from the gas turbine.

NSPS Sources: This project includes New Source Performance Standards in 40 CFR 60 for the gas turbines (Subpart GG) and the duct burners in the heat recovery steam generator (Subpart Db).

3.0 PROPOSED PROJECT

3.1 Project Description

This permit addresses the following emissions units:

| ARMS ID No. | EMISSIONS UNIT DESCRIPTION | |
|----------------|--|--|
| 001 | The combustion turbine is a General Electric Model Frame 7FA primarily fired with natural gas. It has a direct electrical generating capacity of 186 MW in simple cycle. | |
| 002 | The heat recovery steam generator (HRSG) with supplemental low NOx duct burners converts waste heat from the combustion turbine into steam during the combined cycle mode to produce an additional 74 MW of electricity from existing steam turbines. | |

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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application. The applicant requests revised VOC standards of 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners.

3.2 Project Emissions

The following table summarizes the PSD applicability for this project.

| | l | | | | |
|-----------|--|---|------------------------------|----------------------------------|---------------------|
| Pollutant | Current Potential Emissions ^a | Proposed Potential Emissions ^b | Net Emissions Increase | Significant Emissions Rate | Subject To BACT? |
| VOC | 16.3 | 20.1 | 3.8° / 20° | 40 | No |

Table Notes:

- a Based on current Permit No. PSD-FL-266.
- b Based on applicant's request.
- c Based on potential-to-potential emissions because this unit is not yet in operation.
- d Because this project has not yet been built, the total emissions must be compared to the significant emissions rate to determine whether or not BACT is triggered for VOC emissions.

4.0 RULE APPLICABILITY

As previously discussed, the newly permitted facility is considered a PSD major source and original Permit No. PSD-FL-266 established emissions standards for CO, NOx, PM/PM10 and SO2 that represent a determination of the Best Available Control Technology (BACT). The PSD major facility is located in Palm Beach County, an area that is currently in attainment or designated as unclassifiable for all air pollutants subject to a National Ambient Air Quality Standard (AAQS). Therefore, the project is subject to a review for the Prevention of Significant Deterioration of Air Quality accordance with Rule 62-212.400, F.A.C. The PSD review consists of two parts. The first part requires the Department to establish the Best Available Control Technology (BACT) for each significant pollutant exceeding the Significant Emission Rates defined in Table 212.400-2, F.A.C. The second part requires an Air Quality Analysis for any pollutants with significant emission rates. As shown in Section 3.2, the proposed changes will result in total VOC emissions well below the Significant Emission Rate of 40 tons per year. Therefore, this project is not subject to PSD and does not require a BACT determination.

The emission units affected by this PSD permit shall comply with all applicable provisions of the Florida Administrative Code and the applicable requirements of the Code of Federal Regulations.

4.1 State Regulations

| Chapter 62-4 | Permits. |
|-----------------|--|
| Rule 62-204.220 | Ambient Air Quality Protection |
| Rule 62-204.240 | Ambient Air Quality Standards |
| Rule 62-204.260 | Prevention of Significant Deterioration Increments |
| Rule 62-204.800 | Federal Regulations Adopted by Reference |
| Rule 62-210.300 | Permits Required |
| Rule 62-210.350 | Public Notice and Comments |
| Rule 62-210.370 | Reports |
| Rule 62-210.550 | Stack Height Policy |
| Rule 62-210.650 | Circumvention |
| Rule 62-210.700 | Excess Emissions |
| Rule 62-210.900 | Forms and Instructions |
| Rule 62-212.300 | General Preconstruction Review Requirements |
| Rule 62-212.400 | Prevention of Significant Deterioration |
| Chapter 62-213 | Operation Permits for Major Sources of Air Pollution |
| Chapter 62-214 | Requirements For Sources Subject To The Federal Acid Rain Program |
| Rule 62-296.320 | General Pollutant Emission Limiting Standards |
| Rule 62-296.406 | Fossil Fuel Fired Steam Generators With < 250 mmBTU Per Hour Of Heat Input |
| Rule 62-297.310 | General Test Requirements |
| Rule 62-297.401 | Compliance Test Methods |
| Rule 62-297.520 | EPA Continuous Monitor Performance Specifications |
| Federal Rules | • |
| 40 CFR 52.21 | Prevention of Significant Deterioration |
| 40 CFR 60 | NSPS Subparts Db and GG |
| 40 CFR 60 | NSPS Subpart A, General Provisions |
| 40 CFR 72 | Acid Rain Permits (applicable sections) |
| 40 CFR 73 | Allowances (applicable sections) |
| 40 CFR 75 | Monitoring (applicable sections including applicable appendices) |
| 40 CFR 77 | Acid Rain Program-Excess Emissions (future applicable requirements) |

4.2

5.0 DEPARTMENT'S REVIEW

The applicant requests that the current VOC standards of 1.7 ppmvw and 3.8 pounds per hour be increased to 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. VOC emissions from the original project were below the significant emission rate of 40 tons per year, so a BACT determination was not required. The proposed change will result in a net emissions increase of 3.8 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which continues to remain well below the significant emissions rate. Therefore, PSD does not apply and a determination of Best Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled scenarios in the original Air Quality Analysis. The Department believes the request is reasonable and has revised page 14 of the permit as requested.

7. CONCLUSION

Based on the technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the Draft Permit, the Department makes a preliminary determination that the proposed project is capable of complying with all applicable state and federal air pollution regulations. Jeff Koerner, P.E., is the project engineer responsible for reviewing the application, recommending this determination, and drafting the permit.

New Source Review Section, Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS #5505 Tallahassee, FL 32399-2400

Telephone: 850/414-7268

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 May 1, 2001 Permit Expires: 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

The original Permit PSD-FL-266 was revised on (DRAFT) to increase the VOC emissions 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:

Terminology Appendix A:

Construction Permit General Conditions Appendix B:

Appendix C: Department's BACT Determination

NSPS General Provisions Appendix D:

Appendix E: NSPS Subpart Db (HRSG Duct Burner)

NSPS Subpart GG (Gas Turbine) Appendix F:

Summary Report - Gaseous Excess Emission & Monitoring System Performance Appendix G:

> Howard L. Rhodes, Director Division of Air Resources Management

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 emissions standards for the combined emissions from the gas turbine and duct burner on (DRAFT).

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. <u>Alternate Methods of Operation</u>: 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 |
|--|---------------------------------|---|
| EU-001/002: Combustion Turbine With Power Augmentation Or HRSG Duct Firing Or Both | | |
| CO¹ | CC / DLN | 15.0 ppmvd corrected to 15% O2 based on a 24-hour rolling average |
| | PA or DF or Both | (24-hour average is equivalent to 54.0 pounds per hour) |
| | | 20.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average |
| | | 72.0 pounds per hour based on a 3-hour test average |
| NOx ² | CC / DLN | 9.4 ppmvd corrected to 15% O2 based on a 24-hour rolling average |
| | PA or DF or Both | (24-hour average is equivalent to 74.7 pounds per hour) |
| | | 12.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average |
| | | 88.0 pounds per hour based on a 3-hour test average |
| PM/PM10 ³ | CC / CF / CD | Visible emissions shall not exceed 10% opacity (< 0.01 grains/dscf) |
| SAM/SO2 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 on (DRAFT) by PSD-FL-266A.) |
| EU-002: En | nissions From Duct Burn | er Only, Gas Firing |
| NOx ⁷ | CC / DLN / DF | 0.08 pounds per mmBTU of heat input from duct firing only |

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.

Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL 32653-1500 Telephone (352) 336-5600 Fax (352) 336-6603



June 20, 2000

Mr. C. H. Fancy, P.E., Chief Bureau of Air Regulation Florida Department of Environmental Protection Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400 9839537

RECEIVED
JUN 21 2000

BUREAU OF AIR REGULATION

Attention: Mr. A.A. Linero, P.E., New Source Review Section

RE: DEP FILE NO. 099-0568-001-AC / PSD-FL-266

LAKE WORTH GENERATION, L.L.C. COMBINED CYCLE PROJECT

Dear Al:

This correspondence and attached application is submitted on behalf of Lake Worth Generation, L.L.C. (LWG) to request a change in the volatile organic compounds (VOCs) emission rate for the Alternative Methods of Operation listed in Condition 19 of Section III of the Final Permit. The change is required due to the final guaranteed emission rate for VOCs from the duct burner system.

The VOC emission rate in Condition 19 is 1.7 parts per million of volume weight (ppmvw) and 3.8 pounds per hour (lb/hr) with both the gas turbine and duct burner operating. The VOC emission rate for the gas turbine is 1.4 ppmvw and 3.2 lb/hr (Condition 16). The VOC emission rate in the original permit application and the basis for the VOC emission limit in Condition 19 was 0.003-lb VOC/mmBtu for the duck burner system. The duct burner system would add about 0.6 lb/hr and 0.3 ppmvw. The duct burner system is limited to a maximum of 350,000 mmBtu/year in Condition 5.(b), which is equivalent to 2,000 hr/year at the maximum heat input of 175 mmBtu/hr.

The corresponding Nitrogen Oxide (NO_x) and Carbon Monoxide (CO) emission rates were 0.1 lb/mmBtu for the duct burner system. The current design of the duct burner system will achieve a NOx emission rate of 0.08 lb/mmBtu, which is lower than the basis in the original application. The CO emission rate will be 0.1 lb/mmBtu. However, the guaranteed VOC emission rate is 0.025 lb/mmBtu. Based on the permitted heat input limit of 175 mmBtu/hr [Condition 3.(b)], the maximum potential emissions is 4.375 lb/hr (175 mmBtu/hr x 0.025 lb/mmBtu) and 4.375 tons/year (4.375 lb/hr x 2,000 hr/year x ton/2,000).

The combined VOC emissions from the gas turbine and duct burner system would be 7.6 lb/hr (i.e., 3.2 lb/hr from the gas turbine and 4.375 lb/hr from the duct burner system). The VOC concentration is 3.3 ppmvw based on the ratio of gas turbine concentration and

emissions to that of the combined gas turbine and duct burner emissions (i.e., 1.4 ppmvw x 7.6 lb/hr x 1/3.2 lb/hr = 3.3 ppmvw). Therefore, the requested change to Condition 19 of the Final Permit is to increase the VOC emission rate from 1.7 ppmvw and 3.8 lb/hr to 3.3 ppmvw and 7.6 lb/hr.

The maximum potential annual VOC emission in the current permit is 16 tons/year (from Appendix C, 3.0 PSD Applicability Review). The requested change to Condition 19 would increase the annual VOC emissions from the project by about 4 tons/year [(0.025 lb/mmBtu -0.003 lb/mmBtu) x 350,000 mmBtu/year x ton/2,000 lb = 3.85 tons/year]. The total VOC emissions from the project would be 20 tons/year, which is still less than the PSD significant emission rate of 40 tons/year for VOCs.

Please feel free to call if you have questions. Your expeditious review is appreciated.

Sincerely,

GOLDER ASSOCIATES INC

Kennard F. Kosky, P.E.

Principal

KFK/jkw/tla

Enclosures

cc: Paul Doherty, LWG

Brian Chatlosh, LWG

Leonard Shaperio, Energy Resources Group, Inc.

Jeffery F. Koerner, P.E., FDEP Tallahassee

Richard Zwolak, GAI

EPA

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Department of Environmental Protection

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JUN 21 2000

BUREAU OF AIR REGULATION

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

| Identification | of Facility |
|-----------------------|-------------|
|-----------------------|-------------|

| Identification of Facility | | | |
|--|--|--|--|
| Facility Owner/Company Name: Lake Worth Generation, L.L.C. | | | |
| 2. Site Name: | | | |
| Lake Worth Generation | | | |
| 3. Facility Identification Number: 099- | Unknown | | |
| 4. Facility Location: Tom G. Smith Power I Street Address or Other Locator: 117 Col | | | |
| City: Lake Worth County: | Palm Beach Zip Code: 33461 | | |
| 5. Relocatable Facility? | 6. Existing Permitted Facility? | | |
| [] Yes [X] No | [X]Yes []No | | |
| Application Contact | | | |
| 1. Name and Title of Application Contact: | | | |
| Brian Chatlosh, Manager | | | |
| 2. Application Contact Mailing Address: | | | |
| Organization/Firm: Lake Worth General | • | | |
| Street Address: 245 Winter Street, S | uite 300 | | |
| City: Waltham | State: MA Zip Code: 02451 | | |
| 3. Application Contact Telephone Numbers: | • | | |
| Telephone: (781) 370 - 1500 | Fax: (781) 370 - 1501 | | |
| Application Processing Information (DEP Use) | | | |
| 1. Date of Receipt of Application: \(\lambda_0 - 21 - 00 \) | | | |
| 2. Permit Number: 0990564-002-AC | | | |
| 3. PSD Number (if applicable): | 3. PSD Number (if applicable): PSD-FL-266A | | |
| 4. Siting Number (if applicable): | | | |

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one) Initial Title V air operation permit for an existing facility which is classified as a Title V source. [] Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source. Current construction permit number: Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application. Current construction permit number: Operation permit number to be revised: Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.) Operation permit number to be revised/corrected: Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal. Operation permit number to be revised: Reason for revision: Air Construction Permit Application This Application for Air Permit is submitted to obtain: (Check one) [X] Air construction permit to construct or modify one or more emissions units. Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units. [] Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

| ٠. | Brian Chatlosh, Manager |
|----|--|
| 1. | Name and Title of Owner/Authorized Representative or Responsible Official: |

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Lake Worth Generation, L.L.C.

Street Address: 245 Winter Street, Suite 300

City: Waltham

State: MA

Zip Code: **02451**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone: (781) 370-1500

Fax: (781) 370-1501

Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative *(check here [X], if so) or the responsible official (check here [], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Signature

6/19/00 Date

Professional Engineer Certification

1. Professional Engineer Name: Kennard F. Kosky

Registration Number: 14996

2. Professional Engineer Mailing Address:

Organization/Firm: Golder Associates Inc.

Street Address: 6241 NW 23rd Street, Suite 500

City: Gainesville State: FL Zip Code: **32653-1500**

3. Professional Engineer Telephone Numbers:

Telephone: (352) 336 - 5600 Fax: (352) 336-6603

DEP Form No. 62-210.900(1) - Form

Effective: 2/11/99

9839537Y/F1/CSP

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^{*} Attach letter of authorization if not currently on file.

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein*, that:

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

| Hamad I. / Galay | 205 UNE 2000 |
|--|--------------|
| Signature" | Date |
| The state of the s | |

* Attach any exception to certification statement.

DEP Form No. 62-210.900(1) - Form

Effective: 2/11/99

Scope of Application

| Emissions Unit ID | Description of Emissions Unit | Permit Type | Processing Fee | |
|----------------------|-------------------------------|----------------|-------------------|--|
| 002 | HRS G-Duct Burners | ACM2 | \$250.00 | |
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Application Processing Fee

| Check one: [X] Attached - Amount: \$: | [|] Not Applicable |
|---------------------------------------|---|------------------|
|---------------------------------------|---|------------------|

Construction/Modification Information

1. Description of Proposed Project or Alterations:

| | This applicati | :··b | !44 4 | | VOC amission | limais fan sha |
|--|----------------|------|--------|------|--------------|----------------|
| | | | | | | |

This application is submitted to request an increase in the VOC emission limit for the HRSG duct burners. The emission increase is less than 5 tons/year.

- 2. Projected or Actual Date of Commencement of Construction:
- 3. Projected Date of Completion of Construction:

Application Comment

The facility received final permit No. 0990568-001-AC (PSD-FL-266) to construct a 186-MW combined cycle gas turbine project. The project will repower up to 74 MW of existing steam generating capability at the City of Lake Worth Tom G. Smith Power Plant. The project consists of two emission units: 001-combustion turbine and 002-HRSG duct burners. This application is submitted to increase emissions of VOC from the duct burners.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

| 1. | Facility UTM Coor | dinates: | | |
|----|--|--------------------------|-----------------------------------|---------------------|
| | Zone: 17 | East (km) | : 592.8 Nor | th (km): 2943.7 |
| 2. | Facility Latitude/Lo Latitude (DD/MM/S | _ | Longitude (DD/M) | M/SS): 80 / 04 / 04 |
| 3. | Governmental Facility Code: | 4. Facility Status Code: | 5. Facility Major Group SIC Code: | 6. Facility SIC(s): |
| | _ | | | |

7. Facility Comment (limit to 500 characters):

The facility received final permit No. 0990568-001-AC (PSD-FL-266) to construct a 186-MW combined cycle gas turbine project.

Facility Contact

1. Name and Title of Facility Contact:

Paul Doherty, P.E., Project Engineer

2. Facility Contact Mailing Address:

Organization/Firm: Lake Worth Generation, L.L.C.

Street Address: 245 Winter Street, Suite 300

City: Waltham State: MA Zip Code: 02154

3. Facility Contact Telephone Numbers:

Telephone: (781) 370 - 1500 Fax: (781) 370 - 1501

Facility Regulatory Classifications

Check all that apply:

| 1. [] Small Business Stationary Source? [] Unknown | | | | |
|---|--|--|--|--|
| 2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? | | | | |
| 3. [] Synthetic Minor Source of Pollutants Other than HAPs? | | | | |
| 4. [] Major Source of Hazardous Air Pollutants (HAPs)? | | | | |
| 5. [] Synthetic Minor Source of HAPs? | | | | |
| 6. [X] One or More Emissions Units Subject to NSPS? | | | | |
| 7. [] One or More Emission Units Subject to NESHAP? | | | | |
| 8. [] Title V Source by EPA Designation? | | | | |
| 9. Facility Regulatory Classifications Comment (limit to 200 characters): | | | | |
| The duct burners are subject to NSPS Subpart Db. | | | | |
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List of Applicable Regulations

| Requested change in VOC emissions does not change applicable regulations for facility as listed in Air Construction Permit. | | | | |
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DEP Form No. 62-210.900(1) - Form Effective: 2/11/99

B. FACILITY POLLUTANTS

List of Pollutants Emitted

| 1. Pollutant Emitted | 2. Pollutant Classif. | 3. Requested Er | nissions Cap | 4. Basis for Emissions | 5. Pollutant Comment |
|-------------------------|--------------------------|-----------------|--------------|------------------------|-------------------------|
| | | lb/hour | tons/year | Сар | |
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C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

| 1. | Area Map Showing Facility Location: |
|----|---|
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | Equility Diet Dien. |
| 2. | Facility Plot Plan: [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | [] Marver Requested |
| 3. | Process Flow Diagram(s): |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| 1 | Precautions to Prevent Emissions of Unconfined Particulate Matter: |
| 4. | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | [] Attached, Document ID[X] Not Applicable [] Warver Requested |
| 5. | Fugitive Emissions Identification: |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | |
| 6. | Supplemental Information for Construction Permit Application: |
| | [] Attached, Document ID: [X] Not Applicable |
| | |
| 7. | Supplemental Requirements Comment: |
| 7. | • |
| 7. | Supplemental Requirements Comment: Requested change is for VOC emissions. |
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Additional Supplemental Requirements for Title V Air Operation Permit Applications

| 8. List of Proposed Insignificant Activities: [] Attached, Document ID: [] Not Applicable |
|---|
| 9. List of Equipment/Activities Regulated under Title VI: |
| [] Attached, Document ID: |
| [] Equipment/Activities On site but Not Required to be Individually Listed |
| [] Not Applicable |
| 10. Alternative Methods of Operation: |
| [] Attached, Document ID: [] Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading): |
| [] Attached, Document ID: [] Not Applicable |
| 12. Identification of Additional Applicable Requirements: |
| [] Attached, Document ID: [] Not Applicable |
| 13. Risk Management Plan Verification: |
| [] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:) or previously submitted to DEP (Date and DEP Office:) |
| [] Plan to be submitted to CEPPO (Date required:) |
| [] Not Applicable |
| 14. Compliance Report and Plan: |
| [] Attached, Document ID: [] Not Applicable |
| 15. Compliance Certification (Hard-copy Required): |
| [] Attached, Document ID: [] Not Applicable |

| Emissions Unit Information Section | 1 | of | 1 | |
|---|---|----|---|--|
|---|---|----|---|--|

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

| <u>En</u> | nissions Unit Desc | cription and Status | | | | |
|------------|---|-------------------------------|---|-----------------------------|--|--|
| 1. | Type of Emission | ns Unit Addressed in This | s Section: (Check one) | | | |
| [x | process or prod | | n addresses, as a single emis which produces one or more and point (stack or vent). | | | |
| [| process or prod | | n addresses, as a single emis s which has at least one defi gitive emissions. | _ | | |
| [| | | n addresses, as a single emis s which produce fugitive em | | | |
| 2. | Regulated or Unr | egulated Emissions Unit | ? (Check one) | | | |
| [x |] The emissions we emissions unit. | unit addressed in this Em | nissions Unit Information Sec | ction is a regulated | | |
| [| [] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit. | | | | | |
| 3. | Description of En | missions Unit Addressed | in This Section (limit to 60 c | characters): | | |
| | HRSG – Duct Burners | | | | | |
| 4. | Emissions Unit Id ID: 002 | dentification Number: | | [] No ID [] ID Unknown | | |
| 5. | Emissions Unit Status Code: C | 6. Initial Startup Date: 2001 | 7. Emissions Unit Major Group SIC Code: 49 | 8. Acid Rain Unit? [X] | | |
| 9. | Emissions Unit C | Comment: (Limit to 500 C | Characters) | | | |
| | 9. Emissions Unit Comment: (Limit to 500 Characters) HRSG – Duct Burner system rated at 175 mmBtu/hour. | | | | | |

| En | nissions Unit Information Section1 of | 1 | HRSG – Duct Burners |
|-----------|---|---------------------------|---------------------|
| <u>En</u> | nissions Unit Control Equipment | | |
| 1. | Control Equipment/Method Description (Limit | t to 200 characters per o | device or method): |
| | Low – NO _X Burner System | | · |
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| 2. | Control Device or Method Code(s): 024 | | |
| <u>En</u> | nissions Unit Details | | |
| 1. | Package Unit: | : | |
| | Manufacturer: | Model Number: | |
| 2. | Generator Nameplate Rating: | MW | |
| 3. | Incinerator Information: | | OF: |
| | Dwell Temperature: Dwell Time: | | °F seconds |
| | Incinerator Afterburner Temperature: | | °F |

| Emissions | Unit Information | Section | 1 | of | 1 |
|-----------|-------------------------|---------|---|------------|---|
| | | ~~~ | | U I | |

B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

| 1. | Maximum Heat Input Rate: | - | 175 | mmBtu/hr |
|----|---|------------------------------|--------------|-------------------|
| 2. | Maximum Incineration Rate: | lb/hr | | tons/day |
| 3. | Maximum Process or Throughp | out Rate: | | |
| 4. | Maximum Production Rate: | | | |
| 5. | Requested Maximum Operating | g Schedule: | | |
| | | hours/day | | days/week |
| | | weeks/year | 2,000 | hours/year |
| 6. | Operating Capacity/Schedule C | Comment (limit to 200 charac | eters): | |
| | Operation is limited to 350,000 r Final Permit. | mmBtu/year by Specific Cond | lition 5.(b) | of Section III of |

| Emissions Unit Information Section | 1 | of | 1 | |
|------------------------------------|---|----|---|--|
|------------------------------------|---|----|---|--|

C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

List of Applicable Regulations

| Requested change does not affect applicable regulations. | | | | | |
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| Emissions Unit Information Section | 1 | of | 1 | |
|------------------------------------|---|----|---|--|
|------------------------------------|---|----|---|--|

D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

| 1. | Identification of Point on Pl Flow Diagram? Not Applic | | 2. Emission Po | oint Type Code: | | | | | |
|-----|--|-------------------------|--------------------|--------------------------|---------|--|--|--|--|
| 3. | Descriptions of Emission Po 100 characters per point): | oints Comprising | g this Emissions (| Unit for VE Tracking (| imit to | | | | |
| | DB only operates when CT is operating. DB and CT gases will exhaust through a single HRSG stack. | | | | | | | | |
| 4. | ID Numbers or Descriptions | s of Emission Ur | nits with this Emi | ssion Point in Commo | n: | | | | |
| | | | | | | | | | |
| 5. | Discharge Type Code: V | 6. Stack Heigh | ht: feet | 7. Exit Diameter: | feet | | | | |
| 8. | Exit Temperature: °F | 9. Actual Volu Rate: | umetric Flow | 10. Water Vapor: | % | | | | |
| 11. | 11. Maximum Dry Standard Flow Rate: dscfm 12. Nonstack Emission Point Height: feet | | | | | | | | |
| 13. | Emission Point UTM Coord | linates: | | | | | | | |
| | Zone: E | ast (km): | Nort | h (km): | | | | | |
| 14. | Emission Point Comment (1 | imit to 200 chara | acters): | | | | | | |
| | Proposed change will not at Final Permit. | ifect stack param | neters. Refer to e | mission unit description | n in | | | | |
| | • | | | | | | | | |
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| Emissions Unit Information Section | 1 | of | 1 |
|---|---|----|---|
|---|---|----|---|

E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

| Se | Segment Description and Rate: Segment 1 of 1 | | | | | | |
|-----|--|-------------------|-------------------------------|--------------------------|---------------------------|-----------------------------------|--|
| 1. | Segment Description (Proc | cess | /Fuel Type) (| (limit to 500 ch | naract | ters): | |
| | Natural Gas | | | | | | |
| - | | | | | | | |
| | | | | | | | |
| 2. | Source Classification Code 1-01-006-01 | e (S | CC): | 3. SCC Units million cul | | et burned | |
| 4. | Maximum Hourly Rate: 0.171 | 5. | Maximum <i>A</i> 341.8 | Annual Rate: | 6. | Estimated Annual Activity Factor: | |
| 7. | Maximum % Sulfur: | 8. | Maximum % | 6 Ash: | 9. | Million Btu per SCC Unit: 1024 | |
| 10. | Segment Comment (limit | to 20 | 00 characters) |): | • | | |
| | Maximum annual rate base | d or | n final permit | limit of 350,000 | mmE | Btu/year. | |
| | | | | | | | |
| | | | | | | | |
| Se | Segment Description and Rate: Segment of | | | | | | |
| 1. | Segment Description (Prod | cess | /Fuel Type) | (limit to 500 c | harac | ters): | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 2. | Source Classification Code | e (S | CC): | 3. SCC Uni | ts: | | |
| 4. | Maximum Hourly Rate: | 5. | 5. Maximum Annual Rate: | | 6. | Estimated Annual Activity Factor: | |
| 7. | Maximum % Sulfur: | 8. Maximum % Ash: | | 9. | Million Btu per SCC Unit: | | |
| 10. | 10. Segment Comment (limit to 200 characters): | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Emissions out into matter bection . Of | Emissions | Unit | Information | Section | 1 | of | 1 | |
|--|-----------|------|-------------|---------|---|----|---|--|
|--|-----------|------|-------------|---------|---|----|---|--|

F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

| 1. Pollutant Emitted | 2. Primary Control Device Code | 3. Secondary Control Device Code | 4. Pollutant Regulatory Code |
|----------------------|--------------------------------|----------------------------------|---------------------------------------|
| voc | 024 | | EL |
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| Emissions Unit Information Section | 1 | of _ | 1 | HRSG – Duct Burners |
|------------------------------------|---|------|----|---------------------------|
| Pollutant Detail Information Page | 1 | of | 1_ | Volatile Organic Compound |

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

| Potential/Fugitive Emissions | | | | | |
|---|-----------------------------------|---------------------------|--|--|--|
| 1. Pollutant Emitted: | 2. Total Percent Efficie | ency of Control: | | | |
| voc | | | | | |
| 3. Potential Emissions: | | 4. Synthetically | | | |
| 4.375 lb/hour | 4.375 tons/year | Limited? [X] | | | |
| 5. Range of Estimated Fugitive Emissions: | _ | | | | |
| | to to | ns/year | | | |
| 6. Emission Factor: 0.025 lb/mmBtu | | 7. Emissions Method Code: | | | |
| Reference: HRSG - Vendor | | 2 | | | |
| 8. Calculation of Emissions (limit to 600 chara | acters): | | | | |
| 0.025 lb/mmBtu x 175 mmBtu/hr = 4.375 lb/hi 4.375 lb/hr x 2,000 hr/year x ton/2,000 lb - 4.3 | | | | | |
| 9. Pollutant Potential/Fugitive Emissions Com | ment (limit to 200 charac | eters): | | | |
| Allowable Emissions 1 of 1 | | | | | |
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Da Emissions: | ate of Allowable | | | |
| 3. Requested Allowable Emissions and Units: | 4. Equivalent Allowal | ble Emissions: | | | |
| 3.3 ppmvw/7.6 lb/hr* | 4.375 lb/hour | 4.375 tons/year | | | |
| 5. Method of Compliance (limit to 60 characte | rs): | | | | |
| 3-hour test average; Methods 18, 25, or 25A | | | | | |
| 6. Allowable Emissions Comment (Desc. of O | perating Method) (limit to | o 200 characters): | | | |
| * Combined emissions from gas turbine at 3. | 2 lb/hour and 1.4 ppmvw. | | | | |

| Emissions Unit Information Section | 1 | of | 1 | HRSG – Duct Burners |
|---|---|----|---|---------------------|
|---|---|----|---|---------------------|

H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

| Visible Emissions Limitation: Visible Emissions | sions Limitation of |
|---|---|
| 1. Visible Emissions Subtype: | 2. Basis for Allowable Opacity: [] Rule [] Other |
| 3. Requested Allowable Opacity: Normal Conditions: % E Maximum Period of Excess Opacity Allow | exceptional Conditions: % wed: min/hour |
| 4. Method of Compliance: | |
| 5. Visible Emissions Comment (limit to 200 | characters): |
| Not Applicable | |
| | |
| | • |
| | |
| I. CONTINUOUS MO | ONITOR INFORMATION |
| | s Subject to Continuous Monitoring) |
| Continuous Monitoring System: Continuou | s Monitor of |
| 1. Parameter Code: | 2. Pollutant(s): |
| 3. CMS Requirement: | [] Rule [] Other |
| Monitor Information: Manufacturer: | |
| Model Number: | Serial Number: |
| 5. Installation Date: | 6. Performance Specification Test Date: |
| 7. Continuous Monitor Comment (limit to 20 | 00 characters): |
| Not Applicable | |
| | • |
| | · |
| | |

| | HRSG - | Duct | Burners |
|--|--------|-------------|----------------|
|--|--------|-------------|----------------|

| Emissions Unit Information Section 1 | 0 | f 1 | |
|--------------------------------------|---|-----|--|
|--------------------------------------|---|-----|--|

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Supplemental Requirements

| $\overline{}$ | |
|---------------|--|
| 1. | Process Flow Diagram |
| | [] Attached, Document ID:[X] Not Applicable [] Waiver Requested |
| _ | |
| 2. | Fuel Analysis or Specification |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| 2 | Detailed Description of Control Equipment |
| ٦. | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | [] Attached, Document ID [X] Not Applicable [] waiver requested |
| 4. | Description of Stack Sampling Facilities |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | |
| 5. | Compliance Test Report |
| | [] Attached, Document ID: |
| | |
| | Previously submitted, Date: |
| | [X] Not Applicable |
| | |
| 6. | Procedures for Startup and Shutdown |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| <u></u> | Operation and Maintenant Disc |
| ′· | Operation and Maintenance Plan [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | [] Attached, Document ID: [X] Not Applicable [] waiver Requested |
| 8. | Supplemental Information for Construction Permit Application |
| | [] Attached, Document ID:[X] Not Applicable |
| | |
| 9. | Other Information Required by Rule or Statute |
| | [] Attached, Document ID: . [x] Not Applicable |
| | |
| 10 | . Supplemental Requirements Comment: |
| | |
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| | |

| Emissions Unit Information Section | 1 | of | 1 | HRSG – Duct Burners |
|---|---|----|---|---------------------|
|---|---|----|---|---------------------|

Additional Supplemental Requirements for Title V Air Operation Permit Applications

| 11. Alternative Methods of Operation [] Attached, Document ID: [] Not Applicable |
|---|
| 12. Altermative Medica (Constitute (Entire) |
| 12. Alternative Modes of Operation (Emissions Trading) |
| [] Attached, Document ID: [] Not Applicable |
| 13. Identification of Additional Applicable Requirements |
| [] Attached, Document ID: [] Not Applicable |
| 14. Compliance Assurance Monitoring Plan |
| [] Attached, Document ID: [] Not Applicable |
| 15. Acid Rain Part Application (Hard-copy Required) |
| [] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: |
| [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: |
| [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: |
| [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: |
| [] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: |
| [] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: |
| [] Not Applicable |

THE PALM BEACH POST

Published Daily and Sunday West Palm Beach, Palm Beach County, Florida

PROOF OF PUBLICATION

STATE OF FLORIDA COUNTY OF PALM BEACH

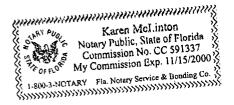
Before the undersigned authority personally appeared **Tyler Dixon** who on oath says that she is Classified Advertising Manager, Inside Sales of The Palm Beach Post, a daily and Sunday newspaper published at West Palm Beach in Palm Beach County, Florida; that the attached copy of advertising, being a Notice in the matter of Intent to Issue Air Construction Permit Modification -- in the Court, was published in said newspaper in the issues of July 28,

Affiant further says that the said The Post is a newspaper published at West Palm Beach, in said Palm Beach County, Florida, and that the said newspaper has heretofore been continuously published in said Palm Beach County, Florida, daily and Sunday and has been entered as second class mail matter at the post office in West Palm Beach, in said Palm Beach County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she/he has neither paid nor promised any person, firm or corporation any discount rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before this 28 day of July A.D. 2000.

Personally known XX or Produced Identification

Type of Identification Produced



NO. 719954 PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION
PERMIT MODIFICATION
STATE OF FLORIDA
DEPARTMENT

OF ENVIRONMENTAL PROTECTION Project No. 0990568-002-AC (PSD-FL-266A) Lake Worth Generation, Modification of Duct VOC Emissions

Palm Beach County The Dapartment of Environ-mental Protection (Depart-ment) gives notice of its intent to issue an air construction permit modification to Lake Worth Generation, L.L.C. The applicant requests that the current VOC standards of 1.7 current VOC standards of 1.7 ppmw and 3.8 pounds per hour be increased to 3.3 ppmw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. The applicant's mailing address is Lake Worth Generation, L.L.C., 245 Winter Street, Suite 300, Waltham, MA 02451. The authorized representative is Brian Chatlosh, Manager. On November 4, 1999, the Department issued en initial PSD

On November 4, 1999, the Department Issued en initial 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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steem generator (MPSG) with steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equip-ment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than ex-pected. The low-NOx duct burners selected will be capa-ble of 0.08 lb/mmBTU in acble of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application.

The Department believes the request is reasonable and has revised pages 1, 3 and 14 of the permit accordingly. The proposed change will result in

proposed change will result in a net emissions increase of a net emissions increase of 4.4 tons per year bringing to-tal VOC emissions from the project to 20.1 tons per year, which continues to remain well below the VOC significant well below the VOC.significant emissions rate of 40 tons per year. Therefore, PSD does not apply and a determination of Bast Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. Tha proposed change would not alter any of the previously modeled sce-narios of the original Air Quali-

ty Analysis. The Department will issue the Finel Permit with the attached conditions unless a response conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for public meets. and requests for public meetand requests for public meet-ings concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of this Public Notice. Written com-ments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL #5505, I alianassee, FL 32399-2400. Any written com-ments filed shall be made avaliable for public inspection. written comments received suit in a significant change in the proposed agency ac-tion, the Department shall re-vise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120,569 and 120,57 F.S., before the deadline for filing a petition. The procedures for potitioning for a hearing are set forth below.

Mediation is not available in this proceeding. A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahasse, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of Intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action 120.60(3), however, any person who asked the Department for notice, regardless of the date of publication. A potitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.599 and 120.57 F.S., or to Intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filling of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain that following information: (a) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner, if any, which shall be the address for service purposes during the course of the proceading; and an explanation of how the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceading; and an explanation of how the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceading; and an explanation of the gency's proposed action; (d) A statement of he agency's proposed action; (f) A statement of the agency's proposed action; (f) A statement of the second to the course of the proceading; and an explanation of the agency's proposed action; (f

specific rules or statutes the petitioner contands require reversal or modification of the petitioner contands require reversal or modification of the
agency's proposed action;
and (g) A statement of the relief sought by the petitioner,
stating precisely the action
petitioner wishes the agency
to take with respect to the
agency's proposed action.
A petition that does not dispute the material facts upon
which the Department's action
is based shall state that no
such facts are in dispute and
otherwise shall contain the
seme information as set forth
above, as required by Rule 28106.301, F.A.C.
Because the administrative
hearing process is designed
to formulate final agency ac-

tion, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at: day through Friday, except le-gal holldays, at: Dept: of Environmental Protection Bureau of Air Regulation 111.S. Magnolla Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 850/488-0114 Dept. of Environmental Pro-tection Southeast District 400 North Congress Avenue West Palm Beach, Florida 33401 Telephone: 561/681-6600
Air Pollution Control Section
Palm Beach County
Health Department 901 Evernia Streat West Palm Beach, Florida 33401 Telephona: 561/355-3070 Telephona: 561/355-3070
The complete project file includes the application, technical avaluations, Draft Permit,
and the Information submitted
by the responsible official, exclusive of confidential records
under Section 403.111. F.S.
Interested persons may contact the project engineer, Jaff
Koerner, at 111 South Magnolia Drive, Suite 4, Tallahessee,
Florida 32301, or call
850/488-0114 for additional
information. information.
PUB: The Palm Beach Post
July 28, 2000

BEST AVAILABLE COPY

m 3 Z 031 392 033

US Postal Service Receipt for Certified Mail No Insurance Coverage Provided. Do not use for International Mail (See reverse)

| | DO HOL GOO TOT THE HIGHOT | tar triair (COD TOTOLOG) |
|-------------------------------|--|--------------------------|
| | Mr. Brian Cha | tlosh |
| | Street & Number 245 Winter St | ., Stuie 300 |
| | Post Office, State, & ZIP Cod Waltham, MA 0 | |
| | Postage | \$ |
| | Certified Fee | |
| | Special Delivery Fee | |
| _ | Restricted Delivery Fee | |
| 199 | Return Receipt Showing to Whom & Date Delivered | |
| April | Return Receipt Showing to Whom, Date, & Addressee's Address | |
| Form 3800 , April 1995 | TOTAL Postage & Fees | \$ |
| E | Postmark or Date 0990568-002-A | C . , |
| | PSD-FL-266A | |
| S | Mailed: 7-21- | -00 |
| | | |

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|---|
| 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. | A. Received by (Please Print Clearly) B. Date of Delivery 705 00 C. Signature X |
| Article Addressed to: | If YES, enter delivery, address below: |
| Mr. Brian Chatlosh Manager Lake Worth Generation, L.L.C. 245 Winter Street, Ste. 300 | 25 22 |
| • Waltham, MA 02451 | 3. Service Type Certified Mail Registered Insured Mail C.O.D. |
| · | 4. Restricted Delivery? (Extra Fee) ☐ Yes |
| Article Number (Copy from service label) Z 031 392 033 | |
| PS Form 3811, July 1999 Domestic Retu | rn Receipt 102595-99-M-1789 |

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 <u>Notice of Final Permit</u> (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on $\frac{9}{30}$ of 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)

(Date)

| го | | MAIL REC | EIPT Coverage Provided) | | |
|------|--|-----------------------------|------------------------------|--|--|
| 5.4 | Article Sent To: | | | | |
| 'n | Brian Chatlosh, Mgr. | | | | |
| Ē | Postage | \$ | 8/29/00 | | |
| 7. | Certified Fee | | Lake Worth Gen. | | |
| 0000 | Return Receipt Fee (Endorsement Required) | | Here | | |
| | Restricted Delivery Fee (Endorsement Required) | | · | | |
| 100 | Total Postage & Fees | \$ | | | |
| H | Name (Please Print Clear) Brian Chat | y) (to be completed by mail | (er) | | |
| 9 | Street, Apt. No.; or PO Bo 245 Winter | St., Ste. 3 | 300 | | |
| 70 | City, State, ZiP+4 Waltham, N | 1A 02451 | ! | | |
| | PS Form 3800, July 1999 | | See Reverse for Instructions | | |

| *** | |
|--|--|
| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
| 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. | Atteuelle Addressee |
| Article Addressed to: | D. Is defivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No |
| Brian Chatlosh, Manager Lake Worth Generation, L.L.C. 245 Winter St., Ste 300 Waltham, MA 02451 | |
| | 3. Service Type ☐ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D. |
| · | 4. Restricted Delivery? (Extra Fee) ☐ Yes |
| 2. Article Number (Copy from service label) 7099 3400 0000 1453 2542 | |
| PS Form 3811, July 1999 Domest | ic Return Receipt 102595-99-M-1789 |
| | , sec |

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 <u>Public Notice of Intent to Issue Permit</u> 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

4911

SIC No.

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

(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 | |
|---|---|---|--|
| EU-001/002: | Combustion Turbine W | stion Turbine With Power Augmentation Or HRSG Duct Firing Or Both | |
| CO ¹ | CC/DLN | 15.0 ppmvd corrected to 15% O2 based on a 24-hour rolling average | |
| .] | PA or DF or Both | (24-hour average is equivalent to 54.0 pounds per hour) | |
| | | 20.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average | |
| | | 72.0 pounds per hour based on a 3-hour test average | |
| NOx ² | CC / DLN | 9.4 ppmvd corrected to 15% O2 based on a 24-hour rolling average | |
| | PA or DF or Both | (24-hour average is equivalent to 74.7 pounds per hour) | |
| | , | 12.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average | |
| | 88.0 pounds per hour based on a 3-hour test average | | |
| PM/PM10 ³ CC / CF / CD Visible emissions shall not exceed 10% opacity (< 0.01 gr | | Visible emissions shall not exceed 10% opacity (< 0.01 grains/dscf) | |
| SAM/SO2 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).} | |
| EU-002: Em | 02: Emissions From Duct Burner Only, Gas Firing | | |
| NOx ⁷ | CC / DLN / DF | 0.08 pounds per mmBTU of heat input from duct firing only | |

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.

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THE PALM BEACH POST

Published Daily and Sunday West Palm Beach, Palm Beach County, Florida

PROOF OF PUBLICATION

STATE OF FLORIDA COUNTY OF PALM BEACH

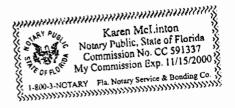
Before the undersigned authority personally appeared Tyler Dixon who on oath says that she is Classified Advertising Manager, Inside Sales of The Palm Beach Post, a daily and Sunday newspaper published at West Palm Beach in Palm Beach County, Florida; that the attached copy of advertising, being a Notice in the matter of Intent to Issue Air Construction Permit Modification -- in the Court, was published in said newspaper in the issues of July 28,

Affiant further says that the said The Post is a newspaper published at West Palm Beach, in said Palm Beach County, Florida, and that the said newspaper has heretofore been continuously published in said Palm Beach County, Florida, daily and Sunday and has been entered as second class mail matter at the post office in West Palm Beach, in said Palm Beach County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she/he has neither paid nor promised any person, firm or corporation any discount rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before this 28 day of July A.D. 2000.

Personally known XX or Produced Identification

Type of Identification Produced



NO, 719954
PUBLIC NOTICE OF INTENT
TO ISSUE AIR CONSTRUCTION
PERMIT MODIFICATION
STATE OF FLORIDA
DEPARTMENT
OF ENVIRONMENTAL
PROTECTION
Project No. 0990569-002-AC
(PSD-FL-286A)
Lake Worth Generation, L.L.C.
Modification of Duct Burner
VOC Emissions
Paim Beach County
The Department of Environ-Palm Beach County
The Department of Environmental Protection (Department) gives notice of ite intent
to Issue an eir construction
permit modification to Lake
Worth Generation, L.L.C. The
applicant requests that the
current VOC stendarde of 1.7
ppmw and 3.8 pounds per
hour be increased to 3.3
ppmw and 7.6 pounds per
hour for the combined emissions from the gas turbine and hour for the combined emissions from the gas turbine and duct burners. The applicant's mailing address is Lake Worth Generation, L.L.C., 245 Winter Street, Suite 300, Waitham, MA 02451. The authorized representative is Brian Chatlosh, Manager.
On November 4, 1999, the Department issued an initial PSD. On November 4, 1999, the Department Issued an Initial PSD permit to Lake Worth Generation, L.C. to construct a new combined cycle plant located at 117 College Street in Lake Worth, Florida. The project consists of a 170 MW combustion turbine with electrical tion turbine with electrical generator set, a heat recovery steam generator (UDGG)

generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling "system, continuous monitoring equipment, end two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than "expected. The tow-NOX duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT_den cordance with the BACT de-termination. However, the VOC emissions for this equip-ment will be 4.4 pounds per hour end not 0.6 pounds per hour as reported in the initial application.

The Department believes the request is reasonable and has

revised pages 1, 3 and 14 of the permit accordingly. The proposed change will result in a net emissions increase of a net emissions increase of 4.4 tons per year bringing to-tal VOC emissions from the project to 20.1 tons per year, which continues to remain well below the VOC significant emissions rate of 40 tons per yeer. Therefore, PSD does not apply and a determination of Best Available Control Tech-nology is not required in ac-cordance with Rule 62cordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled sce-narios of the original Air Quallnarros or the original Air Qual-ty Analysis.

The Department will issue the Final Permit with the attached conditions unless response received in accordance with conditions unless a response received in accordance with the following procedures is sults in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for price of thirty (30) days from the date of publication of this Public Notice. Written commente and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2800 Biair Stone Road, Mall Station #5505, Tallahassee, F. 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change

result in a significant change in the proposed agency ac-tion, the Department shall in

vise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S. before the deadline for filling a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding. A person whose substantial in-

BEST AVAILABLE COPY

proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.559 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filled (received) in the Office of General Counsel of the Department at 3900 Commonwealth Bouleverd, Meil Stetton #35, Tallahassee, Florida, 3239-3000. Petitions filed by the permit applicant flied by the permit applicant or any of the parties listed below must be filled within four-tean (14) days of receipt of this notice of intent. Petitions flied by any persons other than those entitled to written notice. notice under section 120.60(3) of the Florida Statutes must be filled within fourtaen (14) days of publication of the public notice or within fourtaen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who saked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a patition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (haering) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of tha Florida Administrative Code.

A petition that disputes the material facts on which the Department's ection is based must contain the following information: (a) The name and address of each agency's affected and each agency's affected by the agency determination; (c) A statement of how and when petitioner, the name, address, and telephone number of the petitioner received notice of the agency action; (d) A statement of the ultimate facts alleged, including the specific rules or statutes the petitioner contends require reversal or modification of the specific rules or statutes the petitioner contends require reversal or modification of the specific rules or statutes the petitioner contends require reversal or modification of the specific rules or statutes the petitioner contends require reversal or modification of the specific rules or statutes the petit





Department of Environmental Protection

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

David B. Struhs Secretary

July 21, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Brian Chatlosh, Manager Lake Worth Generation, L.L.C. 245 Winter Street, Suite 300 Waltham, MA 02451

Re:

Project No. 0990568-002-AC (PSD-FL-266A) Modification of VOC Standards for Duct Firing Lake Worth Generation, L.L.C.

Dear Mr. Chatlosh:

Enclosed is one copy of the <u>Draft Air Construction Permit Modification</u> for the new Lake Worth Generation Plant to be located at 117 College Street in Lake Worth, Florida. This is a revision of original Permit No. PSD-FL-266 issued on November 4, 1999. The following revised documents are also included: <u>Intent to Issue Air Construction Permit Modification</u>, <u>Technical Evaluation and Preliminary Determination</u>, and the <u>Public Notice of Intent to Issue Air Construction Permit</u>.

The <u>Public Notice</u> must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to the project engineer, Jeff Koerner of the New Source Review Section, at the above letterhead address. If you have any other questions, please contact Mr. Koerner at 850/414-7268.

Sincerely.

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

CHF/ifk

Enclosures

In the Matter of an Application for Permit by:

Mr. Brian Chatlosh, Manager Lake Worth Generation, L.L.C. 245 Winter Street, Suite 300 Waltham, MA 02451 Project No. 0990568-002-AC PSD Permit No. PSD-FL-266A Duct Burner VOC Modification Palm Beach County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

For the reasons stated below, the Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification (copy attached) for the proposed project as detailed in the application and the enclosed Technical Evaluation and Preliminary Determination, .

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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application.

The applicant requests revised VOC standards of 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. The Department believes the request is reasonable and has revised pages 1, 3, and 14 of the permit accordingly. The proposed change will result in a net emissions increase of 4.4 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which remains well below the significant emissions rate.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required to construct the proposed project.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed <u>Public Notice of Intent to Issue Air Construction Permit Modification</u>. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of <u>Public Notice of Intent to Issue Air Permit Modification</u>. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

Lake Worth Generation, L.L.C. Project No. 0990568-002-AC (PSD-FL-266A) Duct Burner VOC Modification Page 2 of 3

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule): and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

Lake Worth Generation, L.L.C. Project No. 0990568-002-AC (PSD-FL-266A) Duct Burner VOC Modification Page 3 of 3

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

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

CERTIFICATE OF SERVICE

Mr. Brian Chatlosh, LWG*

Mr. Paul Doherty, Thermo ECOtek

Mr. Ken Kosky, Golder Associates

Mr. Jim Stormer, PBCHD

Mr. Isidore Goldman, DEP-SED

Mr. Gregg Worley, EPA

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.

Charlette Hayes 7/21/00 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Project No. 0990568-002-AC (PSD-FL-266A)

Lake Worth Generation, L.L.C. Modification of Duct Burner VOC Emissions

Palm Beach County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Lake Worth Generation, L.L.C. The applicant requests that the current VOC standards of 1.7 ppmvw and 3.8 pounds per hour be increased to 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. The applicant's mailing address is Lake Worth Generation, L.L.C., 245 Winter Street, Suite 300, Waltham, MA 02451. The authorized representative is Brian Chatlosh, Manager.

On November 4, 1999, the Department issued an initial 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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application.

The Department believes the request is reasonable and has revised pages 1, 3 and 14 of the permit accordingly. The proposed change will result in a net emissions increase of 4.4 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which continues to remain well below the VOC significant emissions rate of 40 tons per year. Therefore, PSD does not apply and a determination of Best Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled scenarios of the original Air Quality Analysis.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of this Public Notice. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 850/488-0114 Dept. of Environmental Protection Southeast District 400 North Congress Avenue West Palm Beach. Florida 33401 Telephone: 561/681-6600 Air Pollution Control Section
Palm Beach County Health Department
901 Evernia Street
West Palm Beach, Florida 33401
Telephone: 561/355-3070

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the project engineer, Jeff Koerner, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114 for additional information.

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

LAKE WORTH GENERATION, L.L.C.

Modification of VOC Emissions Standards For Emission Units 001 and 002 Lake Worth, Palm Beach County, Florida

Facility I.D. No. 0990568

Project No. 0990568-002-AC Permit No. PSD-FL-266A

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section

July 21, 2000

1.0 APPLICATION INFORMATION

1.1 Applicant Name and Address

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

Authorized Representative:
Brian Chatlosh, Manager

1.2 Reviewing and Process Schedule

06/21/00: Department received application; complete

2.0 FACILITY INFORMATION

2.1 Facility Description

The new 186 MW combined cycle combustion turbine will be located at 117 College Street in Lake Worth, Florida 33461, within the boundaries of the existing Tom G. Smith Power Plant, which is owned and operated by the City of Lake Worth. This site is approximately 104 km north of the Everglades National Park, a Class I PSD Area. The UTM Coordinates are Zone 17, 592.8 km E, 43.7 km N.

2.2 Standard Industrial Classification Codes (SIC)

| Industry Group No. | 49 | Electric, Gas, and Sanitary Services |
|--------------------|------|--------------------------------------|
| Industry No. | 4911 | Electric Services |

2.3 Regulatory Categories

Power Plant Siting: The new facility is not regulated pursuant to the Electric Power Plant and Transmission Line Siting Act because less than 75 MW of steam-generated electrical power will be produced by this project. Therefore it is not subject to requirements of Chapter 403, Part II, F.S. or Chapter 62-17, F.A.C.

Title III – HAP: A case-by-case determination of Maximum Available Control Technology (MACT) in accordance with Section 112(g) does not apply because the new facility is not expected to be a major source of hazardous air pollutants.

Title IV - Acid Rain: The gas turbine is subject to Title IV, the federal Acid Rain program.

Title V – Major Source: The new facility is classified as a Title V major source of air pollution because emissions of at least one regulated air pollutant, such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

PSD Major Source: The new facility is classified as a fossil fuel-fired steam electric plant, which is one of the source categories listed in Table 62-212.400-2, F.A.C. Because emissions of at least one pollutant exceed 100 tons per year, the existing facility is considered a major source of air pollution with respect to PSD. Therefore, new projects must be reviewed for PSD applicability. Each potential emission increase greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a determination of Best Available Control Technology (BACT). The original PSD permit contains BACT determinations for CO, NOx, PM/PM10, SAM/SO2 emissions from the gas turbine.

NSPS Sources: This project includes New Source Performance Standards in 40 CFR 60 for the gas turbines (Subpart GG) and the duct burners in the heat recovery steam generator (Subpart Db).

3.0 PROPOSED PROJECT

3.1 Project Description

This permit addresses the following emissions units:

| ARMS ID No. | EMISSIONS UNIT DESCRIPTION |
|----------------|--|
| 001 | The combustion turbine is a General Electric Model Frame 7FA primarily fired with natural gas. It has a direct electrical generating capacity of 186 MW in simple cycle. |
| 002 | The heat recovery steam generator (HRSG) with supplemental low NOx duct burners converts waste heat from the combustion turbine into steam during the combined cycle mode to produce an additional 74 MW of electricity from existing steam turbines. |

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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application. The applicant requests revised VOC standards of 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners.

3.2 Project Emissions

The following table summarizes the PSD applicability for this project.

| | F | | | | |
|-----------|--|---|------------------------------|----------------------------------|---------------------|
| Pollutant | Current Potential Emissions ^a | Proposed Potential Emissions ^b | Net Emissions Increase | Significant Emissions Rate | Subject To BACT? |
| VOC | 16.3 | 20.1 | 3.8° / 20 ^d | 40 | No |

Table Notes:

- Based on current Permit No. PSD-FL-266.
- b Based on applicant's request.
- c Based on potential-to-potential emissions because this unit is not yet in operation.
- d Because this project has not yet been built, the total emissions must be compared to the significant emissions rate to determine whether or not BACT is triggered for VOC emissions.

4.0 RULE APPLICABILITY

As previously discussed, the newly permitted facility is considered a PSD major source and original Permit No. PSD-FL-266 established emissions standards for CO, NOx, PM/PM10 and SO2 that represent a determination of the Best Available Control Technology (BACT). The PSD major facility is located in Palm Beach County, an area that is currently in attainment or designated as unclassifiable for all air pollutants subject to a National Ambient Air Quality Standard (AAQS). Therefore, the project is subject to a review for the Prevention of Significant Deterioration of Air Quality accordance with Rule 62-212.400, F.A.C. The PSD review consists of two parts. The first part requires the Department to establish the Best Available Control Technology (BACT) for each significant pollutant exceeding the Significant Emission Rates defined in Table 212.400-2, F.A.C. The second part requires an Air Quality Analysis for any pollutants with significant emission rates. As shown in Section 3.2, the proposed changes will result in total VOC emissions well below the Significant Emission Rate of 40 tons per year. Therefore, this project is not subject to PSD and does not require a BACT determination.

The emission units affected by this PSD permit shall comply with all applicable provisions of the Florida Administrative Code and the applicable requirements of the Code of Federal Regulations.

4.1 State Regulations

| Chapter 62-4 | Permits. |
|-----------------|--|
| Rule 62-204.220 | Ambient Air Quality Protection |
| Rule 62-204.240 | Ambient Air Quality Standards |
| Rule 62-204.260 | Prevention of Significant Deterioration Increments |
| Rule 62-204.800 | Federal Regulations Adopted by Reference |
| Rule 62-210.300 | Permits Required |
| Rule 62-210.350 | Public Notice and Comments |
| Rule 62-210.370 | Reports |
| Rule 62-210.550 | Stack Height Policy |
| Rule 62-210.650 | Circumvention |
| Rule 62-210.700 | Excess Emissions |
| Rule 62-210.900 | Forms and Instructions |
| Rule 62-212.300 | General Preconstruction Review Requirements |
| Rule 62-212.400 | Prevention of Significant Deterioration |
| Chapter 62-213 | Operation Permits for Major Sources of Air Pollution |
| Chapter 62-214 | Requirements For Sources Subject To The Federal Acid Rain Program |
| Rule 62-296.320 | General Pollutant Emission Limiting Standards |
| Rule 62-296.406 | Fossil Fuel Fired Steam Generators With < 250 mmBTU Per Hour Of Heat Input |
| Rule 62-297.310 | General Test Requirements |
| Rule 62-297.401 | Compliance Test Methods |
| Rule 62-297.520 | EPA Continuous Monitor Performance Specifications |
| Federal Rules | · |
| 40 CFR 52.21 | Prevention of Significant Deterioration |
| 40 CFR 60 | NSPS Subparts Db and GG |
| 40 CFR 60 | NSPS Subpart A, General Provisions |
| 40 CFR 72 | Acid Rain Permits (applicable sections) |
| 40 CFR 73 | Allowances (applicable sections) |
| 40 CFR 75 | Monitoring (applicable sections including applicable appendices) |
| | |

40 CFR 77

4.2

Acid Rain Program-Excess Emissions (future applicable requirements)

5.0 DEPARTMENT'S REVIEW

The applicant requests that the current VOC standards of 1.7 ppmvw and 3.8 pounds per hour be increased to 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. VOC emissions from the original project were below the significant emission rate of 40 tons per year, so a BACT determination was not required. The proposed change will result in a net emissions increase of 3.8 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which continues to remain well below the significant emissions rate. Therefore, PSD does not apply and a determination of Best Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled scenarios in the original Air Quality Analysis. The Department believes the request is reasonable and has revised page 14 of the permit as requested.

7. CONCLUSION

Based on the technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the Draft Permit, the Department makes a preliminary determination that the proposed project is capable of complying with all applicable state and federal air pollution regulations. Jeff Koerner, P.E., is the project engineer responsible for reviewing the application, recommending this determination, and drafting the permit.

New Source Review Section, Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS #5505 Tallahassee, FL 32399-2400 Telephone: 850/414-7268

DRAFT

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

The original Permit PSD-FL-266 was revised on (DRAFT) to increase the VOC emissions 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

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 emissions standards for the combined emissions from the gas turbine and duct burner on (DRAFT).

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. <u>Alternate Methods of Operation</u>: 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 | |
|----------------------|---------------------------------|---|--|
| EU-001/002: | Combustion Turbine W | ith Power Augmentation Or HRSG Duct Firing Or Both | |
| CO ¹ | CC / DLN | 15.0 ppmvd corrected to 15% O2 based on a 24-hour rolling average | |
| | PA or DF or Both | (24-hour average is equivalent to 54.0 pounds per hour) | |
| | | 20.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average | |
| | | 72.0 pounds per hour based on a 3-hour test average | |
| NOx ² | CC / DLN | 9.4 ppmvd corrected to 15% O2 based on a 24-hour rolling average | |
| | PA or DF or Both | (24-hour average is equivalent to 74.7 pounds per hour) | |
| | | 12.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average | |
| | | 88.0 pounds per hour based on a 3-hour test average | |
| PM/PM10 ³ | CC / CF / CD | Visible emissions shall not exceed 10% opacity (< 0.01 grains/dscf) | |
| SAM/SO2 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 on (DRAFT) by PSD-FL-266A.) | |
| EU-002: Em | issions From Duct Burne | er Only, Gas Firing | |
| NOx ⁷ | CC / DLN / DF | 0.08 pounds per mmBTU of heat input from duct firing only | |

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.



Department of Environmental Protection

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

David B. Struhs Secretary

July 21, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Brian Chatlosh, Manager Lake Worth Generation, L.L.C. 245 Winter Street, Suite 300 Waltham, MA 02451

Re:

Project No. 0990568-002-AC (PSD-FL-266A) Modification of VOC Standards for Duct Firing

Lake Worth Generation, L.L.C.

Dear Mr. Chatlosh:

Enclosed is one copy of the <u>Draft Air Construction Permit Modification</u> for the new Lake Worth Generation Plant to be located at 117 College Street in Lake Worth, Florida. This is a revision of original Permit No. PSD-FL-266 issued on November 4, 1999. The following revised documents are also included: <u>Intent to Issue Air Construction Permit Modification</u>, <u>Technical Evaluation and Preliminary Determination</u>, and the <u>Public Notice of Intent to Issue Air Construction Permit</u>.

The <u>Public Notice</u> must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to the project engineer, Jeff Koerner of the New Source Review Section, at the above letterhead address. If you have any other questions, please contact Mr. Koerner at 850/414-7268.

Sincerely,

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

CHF/jfk

Enclosures

In the Matter of an Application for Permit by:

Mr. Brian Chatlosh, Manager Lake Worth Generation, L.L.C. 245 Winter Street, Suite 300 Waltham, MA 02451 Project No. 0990568-002-AC PSD Permit No. PSD-FL-266A Duct Burner VOC Modification Palm Beach County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

For the reasons stated below, the Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification (copy attached) for the proposed project as detailed in the application and the enclosed Technical Evaluation and Preliminary Determination,

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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application.

The applicant requests revised VOC standards of 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. The Department believes the request is reasonable and has revised pages 1, 3, and 14 of the permit accordingly. The proposed change will result in a net emissions increase of 4.4 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which remains well below the significant emissions rate.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required to construct the proposed project.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed <u>Public Notice of Intent to Issue Air Construction Permit Modification</u>. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of <u>Public Notice of Intent to Issue Air Permit Modification</u>. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

Lake Worth Generation, L.L.C. Project No. 0990568-002-AC (PSD-FL-266A) Duct Burner VOC Modification Page 2 of 3

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

Lake Worth Generation, L.L.C. Project No. 0990568-002-AC (PSD-FL-266A) **Duct Burner VOC Modification** Page 3 of 3

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit Modification (including the Public Notice of Intent to Issue Air Construction Permit Modification, Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on $\frac{7/21/00}{}$ to the persons listed:

Mr. Brian Chatlosh, LWG*

Mr. Paul Doherty, Thermo ECOtek

Mr. Ken Kosky, Golder Associates

Mr. Jim Stormer, PBCHD

Mr. Isidore Goldman, DEP-SED

Mr. Gregg Worley, EPA

Mr. John Bunvak, 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.

Charlette Haves 7/21/00 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Project No. 0990568-002-AC (PSD-FL-266A)

Lake Worth Generation, L.L.C.

Modification of Duct Burner VOC Emissions

Palm Beach County :

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Lake Worth Generation, L.L.C. The applicant requests that the current VOC standards of 1.7 ppmvw and 3.8 pounds per hour be increased to 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. The applicant's mailing address is Lake Worth Generation, L.L.C., 245 Winter Street, Suite 300, Waltham, MA 02451. The authorized representative is Brian Chatlosh, Manager.

On November 4, 1999, the Department issued an initial 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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application.

The Department believes the request is reasonable and has revised pages 1, 3 and 14 of the permit accordingly. The proposed change will result in a net emissions increase of 4.4 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which continues to remain well below the VOC significant emissions rate of 40 tons per year. Therefore, PSD does not apply and a determination of Best Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled scenarios of the original Air Quality Analysis.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of this Public Notice. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 850/488-0114 Dept. of Environmental Protection Southeast District 400 North Congress Avenue West Palm Beach, Florida 33401 Telephone: 561/681-6600

Air Pollution Control Section
Palm Beach County Health Department
901 Evernia Street
West Palm Beach, Florida 33401
Telephone: 561/355-3070

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the project engineer, Jeff Koerner, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114 for additional information.

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

LAKE WORTH GENERATION, L.L.C.

Modification of VOC Emissions Standards For Emission Units 001 and 002 Lake Worth, Palm Beach County, Florida

Facility I.D. No. 0990568

Project No. 0990568-002-AC Permit No. PSD-FL-266A

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section

July 21, 2000

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1.0 APPLICATION INFORMATION

1.1 Applicant Name and Address

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

Authorized Representative:
Brian Chatlosh, Manager

1.2 Reviewing and Process Schedule

06/21/00: Department received application; complete

2.0 FACILITY INFORMATION

2.1 Facility Description

The new 186 MW combined cycle combustion turbine will be located at 117 College Street in Lake Worth, Florida 33461, within the boundaries of the existing Tom G. Smith Power Plant, which is owned and operated by the City of Lake Worth. This site is approximately 104 km north of the Everglades National Park, a Class I PSD Area. The UTM Coordinates are Zone 17, 592.8 km E, 43.7 km N.

2.2 Standard Industrial Classification Codes (SIC)

| Industry Group No. | 49 | Electric, Gas, and Sanitary Services |
|--------------------|------|--------------------------------------|
| Industry No. | 4911 | Electric Services |

2.3 Regulatory Categories

Power Plant Siting: The new facility is not regulated pursuant to the Electric Power Plant and Transmission Line Siting Act because less than 75 MW of steam-generated electrical power will be produced by this project. Therefore it is not subject to requirements of Chapter 403, Part II, F.S. or Chapter 62-17, F.A.C.

Title III – HAP: A case-by-case determination of Maximum Available Control Technology (MACT) in accordance with Section 112(g) does not apply because the new facility is not expected to be a major source of hazardous air pollutants.

Title IV - Acid Rain: The gas turbine is subject to Title IV, the federal Acid Rain program.

Title V – Major Source: The new facility is classified as a Title V major source of air pollution because emissions of at least one regulated air pollutant, such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

PSD Major Source: The new facility is classified as a fossil fuel-fired steam electric plant, which is one of the source categories listed in Table 62-212.400-2, F.A.C. Because emissions of at least one pollutant exceed 100 tons per year, the existing facility is considered a major source of air pollution with respect to PSD. Therefore, new projects must be reviewed for PSD applicability. Each potential emission increase greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a determination of Best Available Control Technology (BACT). The original PSD permit contains BACT determinations for CO, NOx, PM/PM10, SAM/SO2 emissions from the gas turbine.

NSPS Sources: This project includes New Source Performance Standards in 40 CFR 60 for the gas turbines (Subpart GG) and the duct burners in the heat recovery steam generator (Subpart Db).

3.0 PROPOSED PROJECT

3.1 Project Description

This permit addresses the following emissions units:

| ARMS ID No. | EMISSIONS UNIT DESCRIPTION |
|----------------|--|
| 001 | The combustion turbine is a General Electric Model Frame 7FA primarily fired with natural gas. It has a direct electrical generating capacity of 186 MW in simple cycle. |
| 002 | The heat recovery steam generator (HRSG) with supplemental low NOx duct burners converts waste heat from the combustion turbine into steam during the combined cycle mode to produce an additional 74 MW of electricity from existing steam turbines. |

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 project consists of a 170 MW combustion turbine with electrical generator set, a heat recovery steam generator (HRSG) with duct burners, an absorption or evaporative cooling system, continuous monitoring equipment, and two exhaust stacks. The final design specification for the duct burner system indicates that the VOC emissions will be higher than expected. The low-NOx duct burners selected will be capable of 0.08 lb/mmBTU in accordance with the BACT determination. However, the VOC emissions for this equipment will be 4.4 pounds per hour and not 0.6 pounds per hour as reported in the initial application. The applicant requests revised VOC standards of 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners.

3.2 Project Emissions

The following table summarizes the PSD applicability for this project.

| | I | | | | |
|-----------|--|------|------------------------------|----------------------------------|---------------------|
| Pollutant | Current Proposed Potential Potential Emissions ^a Emissions ^b | | Net Emissions Increase | Significant Emissions Rate | Subject To BACT? |
| VOC | 16.3 | 20.1 | 3.8° / 20 ^d | 40 | No |

Table Notes:

- a Based on current Permit No. PSD-FL-266.
- b Based on applicant's request.
- c Based on potential-to-potential emissions because this unit is not yet in operation.
- d Because this project has not yet been built, the total emissions must be compared to the significant emissions rate to determine whether or not BACT is triggered for VOC emissions.

4.0 RULE APPLICABILITY

As previously discussed, the newly permitted facility is considered a PSD major source and original Permit No. PSD-FL-266 established emissions standards for CO, NOx, PM/PM10 and SO2 that represent a determination of the Best Available Control Technology (BACT). The PSD major facility is located in Palm Beach County, an area that is currently in attainment or designated as unclassifiable for all air pollutants subject to a National Ambient Air Quality Standard (AAQS). Therefore, the project is subject to a review for the Prevention of Significant Deterioration of Air Quality accordance with Rule 62-212.400, F.A.C. The PSD review consists of two parts. The first part requires the Department to establish the Best Available Control Technology (BACT) for each significant pollutant exceeding the Significant Emission Rates defined in Table 212.400-2, F.A.C. The second part requires an Air Quality Analysis for any pollutants with significant emission rates. As shown in Section 3.2, the proposed changes will result in total VOC emissions well below the Significant Emission Rate of 40 tons per year. Therefore, this project is not subject to PSD and does not require a BACT determination.

The emission units affected by this PSD permit shall comply with all applicable provisions of the Florida Administrative Code and the applicable requirements of the Code of Federal Regulations.

4.1 State Regulations

| Chapter 62-4 | Permits. |
|-----------------|--|
| Rule 62-204.220 | Ambient Air Quality Protection |
| Rule 62-204.240 | Ambient Air Quality Standards |
| Rule 62-204.260 | Prevention of Significant Deterioration Increments |
| Rule 62-204.800 | Federal Regulations Adopted by Reference |
| Rule 62-210.300 | Permits Required |
| Rule 62-210.350 | Public Notice and Comments |
| Rule 62-210.370 | Reports |
| Rule 62-210.550 | Stack Height Policy |
| Rule 62-210.650 | Circumvention |
| Rule 62-210.700 | Excess Emissions |
| Rule 62-210.900 | Forms and Instructions |
| Rule 62-212.300 | General Preconstruction Review Requirements |
| Rule 62-212.400 | Prevention of Significant Deterioration |
| Chapter 62-213. | Operation Permits for Major Sources of Air Pollution |
| Chapter 62-214 | Requirements For Sources Subject To The Federal Acid Rain Program |
| Rule 62-296.320 | General Pollutant Emission Limiting Standards |
| Rule 62-296.406 | Fossil Fuel Fired Steam Generators With < 250 mmBTU Per Hour Of Heat Input |
| Rule 62-297.310 | General Test Requirements |
| Rule 62-297.401 | Compliance Test Methods |
| Rule 62-297.520 | EPA Continuous Monitor Performance Specifications |
| Federal Rules | · |
| 40 CFR 52.21 | Prevention of Significant Deterioration |
| 40 CFR 60 | NSPS Subparts Db and GG |
| 40 CFR 60. | NSPS Subpart A, General Provisions |
| 40 CFR 72 | Acid Rain Permits (applicable sections) |
| 40 CFR 73 | Allowances (applicable sections) |
| 40 CFR 75 | Monitoring (applicable sections including applicable appendices) |
| 40 CFR 77 | Acid Rain Program-Excess Emissions (future applicable requirements) |
| | |

4.2

5.0 DEPARTMENT'S REVIEW

The applicant requests that the current VOC standards of 1.7 ppmvw and 3.8 pounds per hour be increased to 3.3 ppmvw and 7.6 pounds per hour for the combined emissions from the gas turbine and duct burners. VOC emissions from the original project were below the significant emission rate of 40 tons per year, so a BACT determination was not required. The proposed change will result in a net emissions increase of 3.8 tons per year bringing total VOC emissions from the project to 20.1 tons per year, which continues to remain well below the significant emissions rate. Therefore, PSD does not apply and a determination of Best Available Control Technology is not required in accordance with Rule 62-212.400, F.A.C. The proposed change would not alter any of the previously modeled scenarios in the original Air Quality Analysis. The Department believes the request is reasonable and has revised page 14 of the permit as requested.

7. CONCLUSION

Based on the technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the Draft Permit, the Department makes a preliminary determination that the proposed project is capable of complying with all applicable state and federal air pollution regulations. Jeff Koerner, P.E., is the project engineer responsible for reviewing the application, recommending this determination, and drafting the permit.

New Source Review Section, Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS #5505 Tallahassee, FL 32399-2400

Telephone: 850/414-7268

DRAFT

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

The original Permit PSD-FL-266 was revised on (DRAFT) to increase the VOC emissions 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

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 emissions standards for the combined emissions from the gas turbine and duct burner on (DRAFT).

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. <u>Alternate Methods of Operation</u>: 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 | | |
|----------------------|--|---|--|--|
| EU-001/002: | /002: Combustion Turbine With Power Augmentation Or HRSG Duct Firing Or Both | | | |
| CO¹ | CC / DLN | 15.0 ppmvd corrected to 15% O2 based on a 24-hour rolling average | | |
| | PA or DF or Both | (24-hour average is equivalent to 54.0 pounds per hour) | | |
| | | 20.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average | | |
| | | 72.0 pounds per hour based on a 3-hour test average | | |
| NOx ² | CC / DLN | 9.4 ppmvd corrected to 15% O2 based on a 24-hour rolling average | | |
| | PA or DF or Both | (24-hour average is equivalent to 74.7 pounds per hour) | | |
| | | 12.0 ppmvd corrected to 15% O2 based on a 3-hour rolling average | | |
| | | 88.0 pounds per hour based on a 3-hour test average | | |
| PM/PM10 ³ | CC / CF / CD | Visible emissions shall not exceed 10% opacity (< 0.01 grains/dscf) | | |
| SAM/SO2 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 on (DRAFT) by PSD-FL-266A.) | | |
| EU-002: Em | nissions From Duct Burne | er Only, Gas Firing | | |
| NOx ⁷ | CC / DLN / DF | 0.08 pounds per mmBTU of heat input from duct firing only | | |

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.

Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL 32653-1500 Telephone (352) 336-5600 Fax (352) 336-6603



June 20, 2000

9839537

Mr. C. H. Fancy, P.E., Chief Bureau of Air Regulation Florida Department of Environmental Protection Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400

RECEIVED
Jun 2 2 2000

BUREAU OF AIR REGULATION

Attention: Mr. A.A. Linero, P.E., New Source Review Section

RE: DEP FILE NO. 099-0568-001-AC / PSD-FL-266

LAKE WORTH GENERATION, L.L.C. COMBINED CYCLE PROJECT

Dear Al:

This correspondence and attached application is submitted on behalf of Lake Worth Generation, L.L.C. (LWG) to request a change in the volatile organic compounds (VOCs) emission rate for the Alternative Methods of Operation listed in Condition 19 of Section III of the Final Permit. The change is required due to the final guaranteed emission rate for VOCs from the duct burner system.

The VOC emission rate in Condition 19 is 1.7 parts per million of volume weight (ppmvw) and 3.8 pounds per hour (lb/hr) with both the gas turbine and duct burner operating. The VOC emission rate for the gas turbine is 1.4 ppmvw and 3.2 lb/hr (Condition 16). The VOC emission rate in the original permit application and the basis for the VOC emission limit in Condition 19 was 0.003-lb VOC/mmBtu for the duck burner system. The duct burner system would add about 0.6 lb/hr and 0.3 ppmvw. The duct burner system is limited to a maximum of 350,000 mmBtu/year in Condition 5.(b), which is equivalent to 2,000 hr/year at the maximum heat input of 175 mmBtu/hr.

The corresponding Nitrogen Oxide (NO_x) and Carbon Monoxide (CO) emission rates were 0.1 lb/mmBtu for the duct burner system. The current design of the duct burner system will achieve a NOx emission rate of 0.08 lb/mmBtu, which is lower than the basis in the original application. The CO emission rate will be 0.1 lb/mmBtu. However, the guaranteed VOC emission rate is 0.025 lb/mmBtu. Based on the permitted heat input limit of 175 mmBtu/hr [Condition 3.(b)], the maximum potential emissions is 4.375 lb/hr (175 mmBtu/hr x 0.025 lb/mmBtu) and 4.375 tons/year (4.375 lb/hr x 2,000 hr/year x ton/2,000).

The combined VOC emissions from the gas turbine and duct burner system would be 7.6 lb/hr (i.e., 3.2 lb/hr from the gas turbine and 4.375 lb/hr from the duct burner system). The VOC concentration is 3.3 ppmvw based on the ratio of gas turbine concentration and

Mr. A.A. Linero

emissions to that of the combined gas turbine and duct burner emissions (i.e., 1.4 ppmvw x 7.6 lb/hr x 1/3.2 lb/hr = 3.3 ppmvw). Therefore, the requested change to Condition 19 of the Final Permit is to increase the VOC emission rate from 1.7 ppmvw and 3.8 lb/hr to 3.3 ppmvw and 7.6 lb/hr.

The maximum potential annual VOC emission in the current permit is 16 tons/year (from Appendix C, 3.0 PSD Applicability Review). The requested change to Condition 19 would increase the annual VOC emissions from the project by about 4 tons/year [(0.025 lb/mmBtu - 0.003 lb/mmBtu) x 350,000 mmBtu/year x ton/2,000 lb = 3.85 tons/year]. The total VOC emissions from the project would be 20 tons/year, which is still less than the PSD significant emission rate of 40 tons/year for VOCs.

Please feel free to call if you have questions. Your expeditious review is appreciated.

Sincerely,

GOLDER ASSOCIATES INC

Kernard F. Kosky, P.E.

Principal

KFK/jkw/tla

Enclosures

cc: Paul Doherty, LWG

Brian Chatlosh, LWG

Leonard Shaperio, Energy Resources Group, Inc.

Jeffery F. Koerner, P.E., FDEP Tallahassee

Richard Zwolak, GAI

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Department of Environmental Protection

Division of Air Resources Management RECEIVED

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

JUN 22 2000

I. APPLICATION INFORMATION

BUREAU OF AIR REGULATION

| | 4°6" - 4° 6 TO 91°4 | | | | |
|------------|-------------------------------------|------------|-----------------|------------------------|--|
| Īđ | entification of Facility | | | | |
| 1. | Facility Owner/Company Name: | | | | |
| | Lake Worth Generation, L.L.C. | | | | |
| 2. | Site Name: | | | | |
| | Lake Worth Generation | | | | |
| 3. | Facility Identification Number: | 099-05 | 68 |] Unknown | |
| 4. | Facility Location: Tom G. Smith | | | | |
| | Street Address or Other Locator: | 117 Colle | ge Street | | |
| | City: Lake Worth | County: F | Palm Beach | Zip Code: 33461 | |
| 5. | Relocatable Facility? | | 6. Existing Per | ♥ | |
| | [] Yes [X] No | | [X]Yes | [] No | |
| <u>A</u> I | oplication Contact | | | | |
| 1. | Name and Title of Application Cor | ntact: | | | |
| | Brian Chatlosh, Manager | | | | |
| 2. | Application Contact Mailing Address | | | | |
| | Organization/Firm: Lake Worth | Generatio | n, L.L.C. | | |
| | Street Address: 245 Winter S | treet, Sui | te 300 | | |
| | City: Waltham | | State: MA | Zip Code: 02451 | |
| 3. | Application Contact Telephone Nu | mbers: | | | |
| | Telephone: (781) 370 - 1500 | | Fax: (781) | 370 - 1501 | |
| Aı | oplication Processing Information | (DEP Us | <u>se)</u> | | |
| 1. | Date of Receipt of Application: | | | | |
| 2. | Permit Number: | | | | |
| 3. | PSD Number (if applicable): | | | | |
| 4. | Siting Number (if applicable): | 1 | - | - | |

Purpose of Application

Air Operation Permit Application

| Th | iis | Application for Air Permit is submitted to obtain: (Check one) |
|-----|-----|---|
| [|] | Initial Title V air operation permit for an existing facility which is classified as a Title V source. |
| [|] | Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source. |
| | | Current construction permit number: |
| [|] | Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application. |
| | | Current construction permit number: |
| | | Operation permit number to be revised: |
| [|] | Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.) |
| | | Operation permit number to be revised/corrected: |
| [|] | Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal. |
| | | Operation permit number to be revised: |
| | | Reason for revision: |
| Ai | r (| Construction Permit Application |
| Th | is | Application for Air Permit is submitted to obtain: (Check one) |
| [X | [] | Air construction permit to construct or modify one or more emissions units. |
| [|] | Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units. |
| [|] | Air construction permit for one or more existing, but unpermitted, emissions units. |

6/20/00

Owner/Authorized Representative or Responsible Official

| 1. | Name and Title of (| Owner/Author | ized Representative of | r Responsible Official: |
|-----------|---|---|--|--|
| | Brian Chatlosh, Mar | nager | | |
| 2. | Owner/Authorized | Representative | or Responsible Offi | cial Mailing Address: |
| | Organization/Firm: | Lake Worth G | Seneration, L.L.C. | |
| | Street Address: | 245 Winter St | reet, Suite 300 | |
| | City: | Waitham | State: MA | Zip Code: 02451 |
| 3. | Owner/Authorized | Representative | or Responsible Offi | cial Telephone Numbers: |
| | Telephone: (781) | 370 - 1500 | Fax: | (781) 370 - 1501 |
| 4. | Owner/Authorized | Representative | e or Responsible Offi | cial Statement: |
| | the responsible office application, whiche formed after reason accurate and complete reported in this applemissions. The air in this application was standards for controller and rules of the Defunderstand that a p | cial (check her ver is applicated lable inquiry, the lete and that, the lication are be pollutant emist will be operated of air polluted partment of En the Department | re [], if so) of the T ble. I hereby certify, that the statements m to the best of my know ased upon reasonable ssions units and air pe and maintained so tant emissions found avironmental Protective ed by the Department, | entative*(check here [], if so) or Fitle V source addressed in this based on information and belief ade in this application are true, veledge, any estimates of emissions te techniques for calculating collution control equipment described as to comply with all applicable in the statutes of the State of Florida ion and revisions thereof. I t, cannot be transferred without by notify the Department upon sale or |
| | Signature | | | Date |
| | | | | |
| * A | Attach letter of author | rization if not | currently on file. | |
| <u>Pr</u> | ofessional Engineer | Certification | | |
| 1. | Professional Engine | er Name: Ke | nnard F. Kosky | |
| | Registration Number | er: 14996 | | |
| 2. | Professional Engine | _ | · · | |
| | Organization/Firm | Golder Acco | ciatae Inc | |

Telephone: (352) 336 - 5600 Fax: (352) 336 - 6603

Street Address: 6241 NW 23rd Street, Suite 500

City: Gainesville

3. Professional Engineer Telephone Numbers:

DEP Form No. 62-210.900(1) - Form Effective: 2/11/99 3 Zip Code: **32653-1500**

State: FL

| • | Professional Engineer Statement: |
|---|---|
| | I, the undersigned, hereby certify, except as particularly noted herein*, that: |
| | (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and |
| | (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application. |
| | If the purpose of this application is to obtain a Title V source air operation permit (check here [], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application. |
| | If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application. |
| | If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. |
| | Signature Date |
| | (seal) |
| F | Attach any exception to certification statement. |

Scope of Application

| Emissions Unit ID | Description of Emissions Unit | Permit Type | Processing Fee | |
|----------------------|-------------------------------|----------------|-------------------|--|
| 002 | HRS G-Duct Burners | ACM2 | \$250.00 | |
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Application Processing Fee

| Check one: [X] Attached - Amount: \$: | [|] | Not Applicable |
|---------------------------------------|---|---|----------------|
|---------------------------------------|---|---|----------------|

Construction/Modification Information

1. Description of Proposed Project or Alterations:

| This application is submitted to request an increase in the VOC emission limit for the |
|--|
| HRSG duct burners. The emission increase is less than 5 tons/year. |

- 2. Projected or Actual Date of Commencement of Construction:
- 3. Projected Date of Completion of Construction:

Application Comment

The facility received final permit No. 0990568-001-AC (PSD-FL-266) to construct a 186-MW combined cycle gas turbine project. The project will repower up to 74 MW of existing steam generating capability at the City of Lake Worth Tom G. Smith Power Plant. The project consists of two emission units: 001-combustion turbine and 002-HRSG duct burners. This application is submitted to increase emissions of VOC from the duct burners.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

| 1. | Facility UTM Coor | dinates: | | |
|----|--|--------------------------|-----------------------------------|---|
| | Zone: 17 | East (km) |): 592.8 | North (km): 2943.7 |
| 2. | Facility Latitude/Lo Latitude (DD/MM/S | • | Longitude (DI | D/MM/SS): 80 / 04 / 04 |
| 3. | Governmental Facility Code: | 4. Facility Status Code: | 5. Facility Major Group SIC Co | • |
| | 0 | A | 49 | 4911 |
| _ | E 111. O / | 11 1 | | |

7. Facility Comment (limit to 500 characters):

The facility received final permit No. 0990568-001-AC (PSD-FL-266) to construct a 186-MW combined cycle gas turbine project.

Facility Contact

1. Name and Title of Facility Contact:

Paul Doherty, P.E., Project Engineer

2. Facility Contact Mailing Address:

Organization/Firm: Lake Worth Generation, L.L.C.

Street Address: 245 Winter Street, Suite 300

City: Waltham State: MA Zip Code: 02154

3. Facility Contact Telephone Numbers:

Telephone: (781) 370 - 1500 Fax: (781) 370 - 1501

Facility Regulatory Classifications

| Check | all | that | ap | ply: |
|-------|-----|------|----|------|
|-------|-----|------|----|------|

| 1. [] Small Business Stationary Source? [] Unknown |
|---|
| 2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? |
| 3. [] Synthetic Minor Source of Pollutants Other than HAPs? |
| 4. [] Major Source of Hazardous Air Pollutants (HAPs)? |
| 5. [] Synthetic Minor Source of HAPs? |
| 6. [X] One or More Emissions Units Subject to NSPS? |
| 7. [] One or More Emission Units Subject to NESHAP? |
| 8. [] Title V Source by EPA Designation? |
| 9. Facility Regulatory Classifications Comment (limit to 200 characters): |
| The duct burners are subject to NSPS Subpart Db. |
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List of Applicable Regulations

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B. FACILITY POLLUTANTS

<u>List of Pollutants Emitted</u>

| 1. Pollutant Emitted | 2. Pollutant Classif. | 3. Requested En | missions Cap | 4. Basis for Emissions | 5. Pollutant Comment |
|-------------------------|-----------------------|-----------------|--------------|------------------------|-------------------------|
| Billitted | Ciussii. | lb/hour | tons/year | Cap | Comment |
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C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

| 1. | Area Map Showing Facility Location: |
|----|--|
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| 2. | Facility Plot Plan: |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| 3. | Process Flow Diagram(s): |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| 4. | Precautions to Prevent Emissions of Unconfined Particulate Matter: |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| 5. | Fugitive Emissions Identification: |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| 6. | Supplemental Information for Construction Permit Application: |
| | [] Attached, Document ID: [X] Not Applicable |
| | |
| 7. | Supplemental Requirements Comment: |
| 7. | Supplemental Requirements Comment: Requested change is for VOC emissions. |
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Additional Supplemental Requirements for Title V Air Operation Permit Applications

| 8. List of Proposed Insignificant Activities: [] Attached, Document ID: [] Not Applicable |
|---|
| 9. List of Equipment/Activities Regulated under Title VI: |
| [] Attached, Document ID: |
| [] Equipment/Activities On site but Not Required to be Individually Listed |
| [] Not Applicable |
| 10. Alternative Methods of Operation: |
| [] Attached, Document ID: [] Not Applicable |
| 11. Alternative Modes of Operation (Emissions Trading): |
| [] Attached, Document ID: [] Not Applicable |
| 12. Identification of Additional Applicable Requirements: |
| [] Attached, Document ID: [] Not Applicable |
| 13. Risk Management Plan Verification: |
| [] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:) or previously submitted to DEP (Date and DEP Office:) |
| [] Plan to be submitted to CEPPO (Date required:) |
| [] Not Applicable |
| 14. Compliance Report and Plan: |
| [] Attached, Document ID: [] Not Applicable |
| 15. Compliance Certification (Hard-copy Required): |
| [] Attached, Document ID: [] Not Applicable |

| Emissions Unit Information Section | 1 | of | 1 | HRSG – Duct |
|---|---|----|---|-------------|
| | | | | |

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

| 1. | 1. Type of Emissions Unit Addressed in This Section: (Check one) | | | | | | |
|-----|---|-----------------|------------------------------|-----------------------------|--|--|--|
| [X | X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent). | | | | | | |
| [|] This Emissions Unit Informat process or production units ar (stack or vent) but may also p | nd activities v | which has at least one defin | | | | |
| [|] This Emissions Unit Informat process or production units ar | | • | | | | |
| 2. | Regulated or Unregulated Emis | sions Unit? | (Check one) | | | | |
| [X |] The emissions unit addressed emissions unit. | in this Emiss | sions Unit Information Sec | tion is a regulated | | | |
| [|] The emissions unit addressed emissions unit. | in this Emiss | sions Unit Information Sec | tion is an unregulated | | | |
| 3. | Description of Emissions Unit | Addressed in | This Section (limit to 60 c | haracters): | | | |
| | HRSG – Duct Burners | | | | | | |
| 4. | Emissions Unit Identification N ID: 002 | umber: | ; | [] No ID [] ID Unknown | | | |
| 5. | 5. Emissions Unit Startup Status Code: Date: Group SIC Code: [X] C 2001 7. Emissions Unit Major Group SIC Code: [X] | | | | | | |
| 9. | Emissions Unit Comment: (Lin | nit to 500 Cha | aracters) | | | | |
| | HRSG – Duct Burner system rated at 175 mmBtu/hour. | | | | | | |

DEP Form No. 62-210.900(1) - Form Effective: 2/11/99

Burners

| Emissions Unit Information Section 1 of 1 HRSG – Duct Burne | rs |
|---|----|
| Emissions Unit Control Equipment | |
| 1. Control Equipment/Method Description (Limit to 200 characters per device or method): | |
| Low – NO _X Burner System | |
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| 2. Control Device or Method Code(s): 024 | |
| Emissions Unit Details | |

| 1. | Package Unit: | | |
|----|--------------------------------------|---------------|---------|
| | Manufacturer: | Model Number: | |
| 2. | Generator Nameplate Rating: | MW | |
| 3. | Incinerator Information: | | |
| | Dwell Temperature: | | °F |
| | Dwell Time: | | seconds |
| | Incinerator Afterburner Temperature: | | °F |

| Emissions Unit Information Section | 1 | of | 1 | Н |
|---|---|----|---|---|
|---|---|----|---|---|

HRSG - Duct Burners

B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

| 1. | Maximum Heat Input Rate: | | 175 | mmBtu/hr |
|----|---|---------------------------|----------------|-------------------|
| 2. | Maximum Incineration Rate: | lb/hr | | tons/day |
| 3. | Maximum Process or Through | put Rate: | | |
| 4. | Maximum Production Rate: | | _ | |
| 5. | Requested Maximum Operatin | g Schedule: | | |
| | | hours/day | | days/week |
| | | weeks/year | 2,000 | hours/year |
| 6. | Operating Capacity/Schedule (| Comment (limit to 200 cha | racters): | |
| | Operation is limited to 350,000 Final Permit. | mmBtu/year by Specific Co | ondition 5.(b) | of Section III of |

| Emissions | Unit | Information | Section | 1 | of | 1 |
|-----------|------|-------------|---------|---|----|---|
|-----------|------|-------------|---------|---|----|---|

HRSG - Duct Burners

C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

List of Applicable Regulations

| Requested change does not affect applicable re | gulations. |
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| Emissions Unit Information Sect | tion 1 o | f 1 |
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HRSG – Duct Burners

D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

| 1. | Identification of Point on Pl Flow Diagram? Not Applic | | 2. Emission Point Type Code: | | | | |
|-----|--|-------------------|------------------------------|--------------------------|-------|--|--|
| 3. | 3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): | | | | | | |
| | DB only operates when CT is operating. DB and CT gases will exhaust through a single HRSG stack. | | | | | | |
| 4. | 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: | | | | | | |
| 5. | Discharge Type Code: V | 6. Stack Heigh | ht: feet | 7. Exit Diameter: | feet | | |
| 8. | Exit Temperature: °F | 9. Actual Vol | umetric Flow acfm | 10. Water Vapor: | % | | |
| 11. | 11. Maximum Dry Standard Flow Rate: dscfm 12. Nonstack Emission Point Height: feet | | | | | | |
| 13. | Emission Point UTM Coord | linates: | | _ | | | |
| | Zone: E | ast (km): | North | h (km): | | | |
| 14. | Emission Point Comment (1 | imit to 200 chara | acters): | - | | | |
| | Proposed change will not at Final Permit. | fect stack param | neters. Refer to e | mission unit description | on in | | |
| | | | | | | | |
| | | | | | | | |

| Emissions Unit Information Section 1 of 1 | mation Section 1 of 1 |
|---|-----------------------|
|---|-----------------------|

HRSG - Duct Burners

E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

| Se | gment Description and Ra | te: | Segment 1 | of 1 | | |
|-----|---|------|-------------------------------|------------------|-------|-----------------------------------|
| 1. | Segment Description (Prod | cess | Fuel Type) | (limit to 500 ch | aract | ters): |
| | Natural Gas | | | | | |
| | | | | | | |
| | | | | | | |
| 2. | Source Classification Code 1-01-006-01 | e (S | CC): | 3. SCC Units | | et burned |
| 4. | Maximum Hourly Rate: 0.171 | 5. | Maximum <i>A</i> 341.8 | Annual Rate: | 6. | Estimated Annual Activity Factor: |
| 7. | Maximum % Sulfur: | 8. | Maximum 9 | 6 Ash: | 9. | Million Btu per SCC Unit: 1024 |
| 10. | . Segment Comment (limit t | o 20 | 00 characters |): | | |
| | Maximum annual rate base | d or | n final permit | limit of 350,000 | mmE | Stu/year. |
| | | | | | | |
| | | | | | | |
| Se | gment Description and Ra | te: | Segment | of | | |
| 1. | Segment Description (Proc | ess | /Fuel Type) | (limit to 500 c | harac | ters): |
| | | | | | | |
| | | | | | | |
| | | | | • | | |
| 2. | Source Classification Code | e (S | CC): | 3. SCC Uni | ts: | |
| 4. | Maximum Hourly Rate: | 5. | Maximum A | Annual Rate: | 6. | Estimated Annual Activity Factor: |
| 7. | Maximum % Sulfur: | 8. | Maximum % | % Ash: | 9. | Million Btu per SCC Unit: |
| 10. | Segment Comment (limit t | o 20 | 00 characters |): | - | |
| | | | | | | |
| | | | | | | |
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| cimissions chit into matter section . Of . | Emissions | Unit | Information | Section | 1 | of | 1 |
|--|-----------|------|-------------|---------|---|----|---|
|--|-----------|------|-------------|---------|---|----|---|

HRSG - Duct Burners

F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

| 1 D.11 4 (D.11) | 0.0: | | 4 7 11 |
|----------------------|--------------------|----------------------|-----------------|
| 1. Pollutant Emitted | 2. Primary Control | 3. Secondary Control | 4. Pollutant |
| | Device Code | Device Code | Regulatory Code |
| voc | 024 | | EL |
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| Emissions Unit Information Section _ | 1_ | of _ | 1 | HRSG – Duct Burners |
|--------------------------------------|----|------|---|---------------------------|
| Pollutant Detail Information Page | 1 | of | 1 | Volatile Organic Compound |

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

| Potential/Fugitive Emissions | • |
|--|--|
| 1. Pollutant Emitted: | 2. Total Percent Efficiency of Control: |
| voc | |
| 3. Potential Emissions: | 4. Synthetically |
| 4.375 lb/hour | 4.375 tons/year Limited? [X] |
| 5. Range of Estimated Fugitive Emissions: | to tons/year |
| [] 1 [] 2 [] 3 6. Emission Factor: 0.025 lb/mmBtu | tons/year 7. Emissions |
| | Method Code: |
| Reference: HRSG - Vendor | 2 |
| 8. Calculation of Emissions (limit to 600 chara | cters): |
| 0.025 lb/mmBtu x 175 mmBtu/hr = 4.375 lb/hr | |
| 4.375 lb/hr x 2,000 hr/year x ton/2,000 lb - 4.3 | |
| | |
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| | - |
| 9. Pollutant Potential/Fugitive Emissions Com | ment (limit to 200 characters): |
| | |
| | |
| | |
| Allowable Emissions Allowable Emissions | <u>1</u> of <u>1</u> |
| 1. Basis for Allowable Emissions Code: | 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: | 4. Equivalent Allowable Emissions: |
| 3.3 ppmvw/7.6 lb/hr* | 4.375 lb/hour 4.375 tons/year |
| 5. Method of Compliance (limit to 60 characte | rs): |
| | |
| 3-hour test average; Methods 18, 25, or 25A | |
| 6. Allowable Emissions Comment (Desc. of O | perating Method) (limit to 200 characters): |
| # Combined emissions from sea toucking at 2 | 2 lb/hour and 4.4 names |
| * Combined emissions from gas turbine at 3. | z ib/flour aftu 1.4 ppittaw. |
| · | |

| Emissions Unit Information Section | 1 | of | _1_ | HRSG – Duct Burners |
|---|---|----|-----|---------------------|
|---|---|----|-----|---------------------|

H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

| <u>Vi</u> | sible Emissions Limitation: Visible Emissi | ons | Limi | tation of _ | |
|--|---|------------------------------------|--------|--------------------|---------------------------------------|
| 1. | Visible Emissions Subtype: | 2. | Basi | s for Allowable O | · · · · · · · · · · · · · · · · · · · |
| | | | [| Rule | Other |
| 3. | Requested Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allower | tions: % Exceptional Conditions: % | | | |
| 4. | Method of Compliance: | | | | |
| 5. | Visible Emissions Comment (limit to 200 c | hara | cters) |): | |
| | Not Applicable | | | | |
| | | | | | |
| | | | | | |
| | - | | | | |
| | I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring) | | | | |
| <u>C</u> c | entinuous Monitoring System: Continuous | Mo | nitor | of | |
| 1. | Parameter Code: | 2. | Poll | utant(s): | |
| 3. | CMS Requirement: | [|] R | ule [| Other |
| 4. | Monitor Information: Manufacturer: | | | | |
| | Model Number: | | : | Serial Number: | |
| 5. | Installation Date: | 6. | Perf | formance Specifica | tion Test Date: |
| 7. Continuous Monitor Comment (limit to 200 characters): | | | | | |
| | Not Applicable | | | | |
| | | | | | |
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HRSG - Duct Burners

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Supplemental Requirements

| 1 | Process Flow Diagram |
|------|---|
| 1. | |
| | [] Attached, Document ID:[X] Not Applicable [] Waiver Requested |
| 2 | Fuel Analysis or Specification |
| ۲. | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | [] Attached, Bocument IB[X] Not Applicable [] Warver Requested |
| 3. | Detailed Description of Control Equipment |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | |
| 4. | Description of Stack Sampling Facilities |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | |
| 5. | Compliance Test Report |
| | [] Attached, Document ID: |
| | |
| | Previously submitted, Date: |
| | [X] Not Applicable |
| | []FL |
| 6. | Procedures for Startup and Shutdown |
| ļ °. | [] Attached, Document ID: [x] Not Applicable []. Waiver Requested |
| | [] Thubbled, Socialistic 18. [N] Thort Ipplication [], was very requested |
| 7. | Operation and Maintenance Plan |
| | [] Attached, Document ID: [X] Not Applicable [] Waiver Requested |
| | |
| 8. | Supplemental Information for Construction Permit Application |
| | [] Attached, Document ID: [X] Not Applicable |
| | |
| 9. | Other Information Required by Rule or Statute |
| | [] Attached, Document ID: . [x] Not Applicable |
| | |
| 10 | . Supplemental Requirements Comment: |
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| Emissions Unit Information Section 1 of | 1 HRSG – Duct Burners |
|---|-----------------------|
|---|-----------------------|

Additional Supplemental Requirements for Title V Air Operation Permit Applications

| 11. Alternative Methods of Operation |
|---|
| [] Attached, Document ID: [] Not Applicable |
| 12. Alternative Modes of Operation (Emissions Trading) |
| [] Attached, Document ID: [] Not Applicable |
| 13. Identification of Additional Applicable Requirements |
| [] Attached, Document ID: [] Not Applicable |
| 14. Compliance Assurance Monitoring Plan |
| [] Attached, Document ID: [] Not Applicable |
| 15. Acid Rain Part Application (Hard-copy Required) |
| [] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: |
| [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: |
| [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: |
| [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: |
| [] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: |
| [] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: |
| [] Not Applicable |