

Memorandum

Florida Department of Environmental Protection

To: Joe Kahn, Division of Air Resource Management
Through: Trina Vielhauer, Bureau of Air Regulation *TV*
Through: Jeff Koerner, New Source Review Section *JK*
From: Bruce Mitchell, New Source Review Section *BM*
Date: June 8, 2009
Subject: Final Minor Source Air Construction Permit
Project No. 0990045-007-AC
City of Lake Worth Utilities, Tom G. Smith Power Plant
Unit 3 Retubing Project

The final permit for this project is attached for your approval and signature, which authorizes the repair and replacement of damaged water-wall tubes and refractory in existing fossil-fuel steam generator Unit 3. The project will not change the combustion properties of the unit, increase the maximum heat input rate or change the current dispatch criteria for the unit. The work will be performed in Palm Beach County at 117 College Street in the City of Lake Worth, Florida. The project results in a minor source air construction permit and is not subject to PSD preconstruction review.

The attached Final Determination summarizes the publication and comment process. There are no pending petitions for administrative hearings or extensions of time in which to file a petition for an administrative hearing. I recommend your approval of the attached final permit for this project.

Attachments

TLV/jfk/rbm



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

NOTICE OF FINAL AIR PERMIT

Sent by Electronic Mail – Received Receipt Requested

Mr. David L. Mulvay, Plant Manager
City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida 33461

Air Permit No. 0990045-007-AC
Tom G. Smith Power Plant
Unit S-3 Retubing Project
Palm Beach County, Florida

Dear Mr. Mulvay:

Enclosed is the final air construction permit, which authorizes the repair and replacement of water-wall tubes, refractory and associated components of the existing fossil-fuel steam generating Unit S-3. The proposed work will be conducted at the existing Tom G. Smith Power Plant, which is located in Palm Beach County at 117 College Street in Lake Worth, Florida. As noted in the attached Final Determination, there were no changes made to the draft permit. This 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 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/jfk/rbm

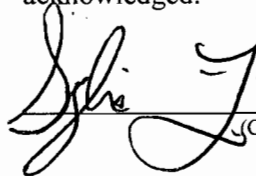
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 6/10/09 to the persons listed below.

- Mr. David L. Mulvay, City of Lake Worth Utilities (dmulvay@lakeworth.org)
- Mr. Michael Ridge, City of Lake Worth Utilities (mr ridge@lakeworth.org)
- Mr. Kennard Kosky, Golder Associates (ken_kosky@golder.com)
- Mr. Sal Mohammad, Golder Associates (sal_mohammad@golder.com)
- Mr. James Stormer, Palm Beach County Health Department (james_stormer@doh.state.fl.us)
- Ms. Vickie Gibson, DEP-BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

6/10/09
(Date)

FINAL DETERMINATION

PERMITTEE

City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida 33461

PERMITTING AUTHORITY

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

PROJECT

Air Permit No. 0990045-007-AC
Minor Air Construction Permit
Tom G. Smith Power Plant

This permit authorizes the repair and replacement of water-wall tubes, refractory and associated components of the existing fossil-fuel steam generating Unit S-3 at the existing Tom G. Smith Power Plant, which is located in Palm Beach County at 117 College Street in Lake Worth, Florida.

NOTICE AND PUBLICATION

The Department distributed a draft minor air construction permit package on April 28, 2009. The applicant published the Public Notice in The Palm Beach Post on May 6, 2009. The Department received the proof of publication on May 15, 2009. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

No comments on the Draft Permit were received from the public, the Local Air Program or the applicant.

CONCLUSION

The final action of the Department is to issue the permit as noticed.



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE:

City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida 33461

Authorized Representative:

Mr. David L. Mulvay, Plant Manager

Project No. 0990045-007-AC
Tom G. Smith Power Plant
Unit S-3 Retubing Project
SIC No. 4931

Permit Expires: July 1, 2010

PROJECT AND LOCATION

This permit authorizes the repair and replacement of water-wall tubes, refractory and associated components of the existing fossil-fuel steam generating Unit S-3 at the existing Tom G. Smith Power Plant, which is located in Palm Beach County at 117 College Street in Lake Worth, Florida. The map coordinates are UTM Zone 17, 592.8 km East and 2943.7 km North.

STATEMENT OF BASIS

This minor source air 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 project is subject to the general preconstruction review requirements of Rule 62-212.300, F.A.C. The permittee is authorized to install the proposed equipment 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).

CONTENTS

- Section I. General Information
- Section II. Administrative Requirements
- Section III. Emissions Unit Specific Conditions
- Section IV. Appendices

Executed in Tallahassee, Florida.

Joseph Kahn, Director
Division of Air Resource Management

Effective Date

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

The Tom G. Smith Power Plant is an existing electric power generating plant located adjacent to a potable water treatment facility. The power plant consists of: five 2000 kilowatt (kW) diesel engine generators; one fossil fuel steam generating unit (S-3); one simple cycle gas turbine unit (GT-1); and one combined cycle gas turbine unit, (GT-2/S-5). Also included in this permit are miscellaneous unregulated and insignificant emissions units and activities.

PROJECT DESCRIPTION

The purpose of the project is to repair and replace the damaged water-wall tubes and refractory of existing fossil-fuel steam generator Unit S-3. In May of 2008, Unit S-3 experienced a failure in the external water-wall releasing steam to the atmosphere. Unit S-3 is required for system security to maintain the power grid within the distribution limits of the city as the City of Lake Worth is on a radial spur from the main statewide electrical transmission grid. The unit is primarily used in a peaking load relief scenario and no longer as a base-loaded unit as originally designed. Due to the high heat rate of this unit, it typically operates only under severe weather conditions or tie line interruptions. Based on information provided by the applicant, Unit S-3 was capable of operating in compliance at permitted capacity prior to the external water-wall failure.

The proposed project will not change the applicability of any existing state or federal requirements. The project is based on an analysis that compared projected actual emissions with baseline actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. Therefore, the permit requires the submittal of annual reports characterizing the actual emissions for a period of five years after completing the project pursuant to Rule 62-212.300(1)(e), F.A.C.

REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.

SECTION II. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify emissions unit shall be submitted to the Bureau of Air Regulation, Florida Department of Environmental Protection (Department), at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall also be submitted to the Compliance Authority.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department. The mailing address is P.O. Box 29, West Palm Beach, Florida 33402. The telephone number is 561/355-3136.
3. Appendices: The following appendices are attached as part of this permit: Appendix A (Citation Formats and Glossary), Appendix B (General Conditions) and Appendix C (Common Testing Requirements).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. Construction and Expiration: The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid if construction is not completed within a reasonable time. The Department may extend the expiration date upon a satisfactory showing that an extension is justified. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1) and 62-212.400(12), F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Source Obligation: At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12), F.A.C.]
8. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. This permit authorizes construction of the referenced facilities. [Chapters 62-210 and 62-212, F.A.C.]
9. Title V Air Operation Permit: This permit authorizes the proposed work and initial operation to determine compliance. A Title V Air Operation Permit is required for regular operation of the permitted emission units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213.420, F.A.C.]

Florida Department of Environmental Protection

Memorandum

To: Trina Vielhauer, Bureau of Air Regulation
Through: Jeff Koerner, New Source Review Section *JK*
From: Bruce Mitchell, New Source Review Section *BM*
Date: April 27, 2009
Subject: Draft Minor Source Air Construction Permit
Project No. 0990045-007-AC
City of Lake Worth Utilities, Tom G. Smith Power Plant
Unit 3 Retubing Project

Attached for your review is a draft minor air construction permit package for the Tom G. Smith Power Plant, which is located in Palm Beach County at 117 College Street in the City of Lake Worth, Florida. Briefly, the draft permit authorizes the repair and replacement of damaged water-wall tubes and refractory in existing fossil-fuel steam generator Unit 3. The project will not change the combustion properties of the unit, increase the maximum heat input rate or change the current dispatch criteria for the unit. The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for permit issuance. Day 90 of the permitting time clock is July 17, 2009. I recommend your approval of the attached draft permit package.

Attachments

TLV/jfk/rbm

P.E. CERTIFICATION STATEMENT

PERMITTEE

City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida 33461

Project No. 0990045-007-AC
Tom G. Smith Power Plant
Unit S-3 Retubing Project
Palm Beach County

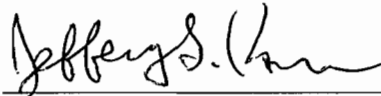
PROJECT DESCRIPTION

The City of Lake Worth Utilities operates an existing electric utility, the Tom G. Smith Power Plant, located at 117 College Street in Lake Worth, Palm Beach County, Florida. The primary purpose of the proposed project is to replace damaged water-wall tubes and refractory of existing fossil-fuel steam generator Unit S-3. This emissions unit is required for system security to maintain the power grid within the City of Lake Worth distribution limits as the City of Lake Worth is on a radial spur from the main statewide electrical transmission grid. It is currently used as a peaking unit. The project will not change the combustion properties of the unit, increase the unit capacity or the current dispatch criteria for the unit.

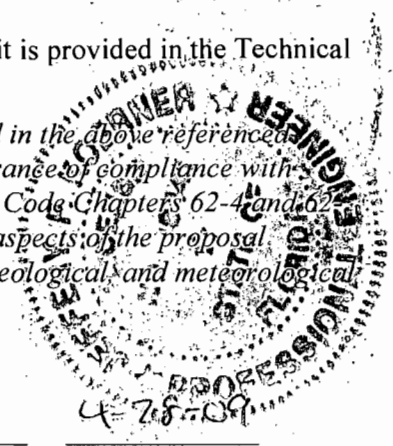
The project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration because there will not be significant net emissions increases of any criteria pollutant. This analysis is based on comparison baseline actual emissions with projected actual emissions. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project. The project is considered a minor modification to a major stationary source.

The Department's full review of the project and rationale for issuing the draft permit is provided in the Technical Evaluation and Preliminary Determination.

***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 any other aspects of the proposal (including, but not limited to, the electrical, mechanical, structural, hydrological, geological and meteorological features).*



Jeffery F. Koerner, P.E.
Registration No. 49441



(Date)



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

April 28, 2009

Electronically Sent - Received Receipt Requested

Mr. David L. Mulvay, Plant Manager
City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida 33461

Re: Project No. 0990045-007-AC
Tom G. Smith Power Plant
Unit S-3 Retubing Project

Dear Mr. Mulvay:

On January 22, 2009, an application was submitted requesting authorization to replace the water-wall tubes in the existing fossil-fuel steam generating Unit S-3 at the Tom G. Smith Power Plant. This facility is located at 117 College Street in Lake Worth, Palm Beach County, Florida. Enclosed are the following documents: Technical Evaluation and Preliminary Determination; Draft Permit and Appendices; Written Notice of Intent to Issue Air Permit; and Public Notice of Intent to Issue Air Permit.

The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact the Project Engineer, Bruce Mitchell, at 850/413-9198.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

TLV/jfk/bm

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Air Permit by:*

City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida 33461

Project No. 0990045-007-AC
Tom G. Smith Power Plant
Unit S-3 Retubing Project
Palm Beach County, Florida

Authorized Representative:

Mr. David L. Mulvay, Plant Manager

Facility Location: The City of Lake Worth Utilities operates an existing electric utility, the Tom G. Smith Power Plant, located at 117 College Street in Lake Worth, Palm Beach County, Florida.

Project: The primary purpose of the proposed project is to replace damaged water-wall tubes and refractory of existing fossil-fuel steam generator Unit S-3. This emissions unit is required for system security to maintain the power grid within the City of Lake Worth distribution limits as the City of Lake Worth is on a radial spur from the main statewide electrical transmission grid. It is currently used as a peaking unit. The project will not change the combustion properties of the unit, increase the unit capacity or the current dispatch criteria for the unit.

The project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration because there will not be significant net emissions increases of any criteria pollutant. This analysis is based on comparison baseline actual emissions with projected actual emissions. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project. The project is considered a minor modification to a major stationary source.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S., and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rules 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 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 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 (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.


A petition that disputes the material facts on which the Permitting Authority'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 when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (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 including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Permitting Authority'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 Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit), was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on

4/28/09 to the persons listed below.

- Mr. David L. Mulvay, City of Lake Worth Utilities (dmulvay@lakeworth.org)
- Mr. Michael Ridge, City of Lake Worth Utilities (mr ridge@lakeworth.org)
- Mr. Kennard Kosky, Golder Associates (ken_kosky@golder.com)
- Mr. Sal Mohammad, Golder Associates (sal_mohammad@golder.com)
- Mr. James Stormer, Palm Beach County Health Department (james_stormer@doh.state.fl.us)
- Ms. Vickie Gibson, DEP-BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), F.S., with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

4/28/09

(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Project No. 0990045-007-AC
City of Lake Worth Utilities – Tom G. Smith Power Plant
Palm Beach County, Florida

Applicant: The applicant for this project is the City of Lake Worth Utilities. The applicant's authorized representative and mailing address is: Mr. David L. Mulvay, Plant Manager, City of Lake Worth Utilities, Tom G. Smith Power Plant, 1900 2nd Avenue North, Lake Worth, Florida 33461.

Facility Location: The City of Lake Worth Utilities operates an existing electric utility, the Tom G. Smith Power Plant, located at 117 College Street in Lake Worth, Palm Beach County, Florida.

Project: The primary purpose of the proposed project is to replace damaged water-wall tubes and refractory of existing fossil-fuel steam generator Unit S-3. This emissions unit is required for system security to maintain the power grid within the City of Lake Worth distribution limits as the City of Lake Worth is on a radial spur from the main statewide electrical transmission grid. It is currently used as a peaking unit. The project will not change the combustion properties of the unit, increase the unit capacity or the current dispatch criteria for the unit.

The project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration because there will not be significant net emissions increases of any criteria pollutant. This analysis is based on comparison baseline actual emissions with projected actual emissions. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project. The project is considered a minor modification to a major stationary source.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site:

www.dep.state.fl.us/air/eproducts/apds/default.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 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 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 (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (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 including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Permitting Authority'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 Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida, 33461

Tom G. Smith Power Plant
Facility ID No. 0990045

PROJECT

Project No. 0990045-007-AC
Application for Minor Source Air Construction Permit
Fossil-Fuel Steam Generator Unit S-3 Retubing Project

COUNTY

Palm Beach County, Florida

PERMITTING AUTHORITY

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

April 27, 2009

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control - General Provisions); 62-210 (Stationary Sources - General Requirements); 62-212 (Stationary Sources - Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources - Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

The Tom G. Smith Power Plant is an existing electric utility, which is categorized under Standard Industrial Classification Code No. 4931. The existing facility is located in Palm Beach County at 117 College Street in the City of Lake Worth, Florida. The UTM coordinates of the existing facility are Zone 17, 592.8 km East, and 2943.7 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Project Description

The purpose of the project is to repair and replace the damaged water-wall tubes and refractory of the fossil-fuel steam generator Unit S-3, which began commercial operation in 1966. In May of 2008, Unit S-3 experienced a failure in the external water-wall releasing steam to the atmosphere. See Figures 1 and 2. Unit S-3 is required for system security to maintain the power grid within the distribution limits of the city as the City of Lake Worth is on a radial spur from the main statewide electrical transmission grid. The unit is primarily used in a peaking load relief scenario and no longer as a base-loaded unit as originally designed. Due to the high heat rate of this unit, it typically operates only under severe weather conditions or tie line interruptions.



Figure 1. Leak in external water-wall.



Figure 2. Malfunction event, steam leaking from Unit S-3.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Facility Regulatory Categories

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.

Processing Schedule

January 22, 2009 Department received an application for a minor source air pollution construction permit.
February 16, 2009 Department requested additional information.
March 19, 2009 Department received additional information.
April 17, 2009 Department requested additional information.
April 19, 2009 Department received additional information; application complete.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 5 tons per year or more of lead;
- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, Portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_x); sulfur dioxide (SO₂); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM₁₀); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H₂S); total reduced sulfur (TRS), including H₂S; reduced sulfur compounds, including H₂S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; and mercury (Hg). In addition, significant emissions rate also means any

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 µg/m³ based on a 24-hour average.

If the difference between the projected actual emissions and the baseline actual emissions equal or exceed the significant emissions rate defined for a PSD pollutant, the project is considered “significant” for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one pollutant, it may be required to install BACT controls for several “significant” PSD pollutants.

PSD Applicability for Project

As provided in the application, the following table summarizes the applicant’s comparison of the projected actual emissions and baseline actual emissions to determine PSD applicability for the project.

Table A. Summary of PSD Applicability

Pollutant	Project Baseline Actual Emissions (TPY)	Project Projected Actual Emissions (TPY)	Net Change (TPY)	Significant Emissions Rate (TPY)	Subject To PSD?
CO	4.2	5.4	+1.2	100	No
NO _x	19.9	27.1	+7.2	40	No
PM/PM ₁₀	0.9/0.9	1.9/1.9	+1.0/+1.0	25/15	No
SO ₂	7.8	20.6	+12.8	40	No
VOC	0.3	0.4	+0.1	40	No

The term “TPY” means tons per year. As shown in the above table, the predicted net emission increases will not exceed the PSD significant emissions rates; therefore, the project is not a major modification and is not subject to PSD preconstruction review.

3. DEPARTMENT REVIEW

Unit S-3 was originally designed as a base-loaded unit. By at least 1996, it was being used as a load-following unit. In 2003, it began to be used as a peak-load unit because of its high heat rate (13,500 Btu/kW). Currently, it typically operates only under severe weather conditions or tie line interruptions. In May of 2008, Unit S-3 experienced a failure in the external water-wall. The project proposes to repair and replace the damaged water-wall tubes and refractory of Unit S-3. The following table shows the past annual operation for Unit S-3.

Year	Annual Operation
2008	< 100 hours/year before failure
2007	105
2006	242
2005	303
2004	67
2003	189
2002	5061
2001	3177

Unit S-3 is permitted to fire natural gas and residual oil at a permitted capacity of 325 MMBtu per hour (26.5 MW). Currently, it primarily fires natural gas and has not fired any oil since 2005. Unit S-3 is regulated for:

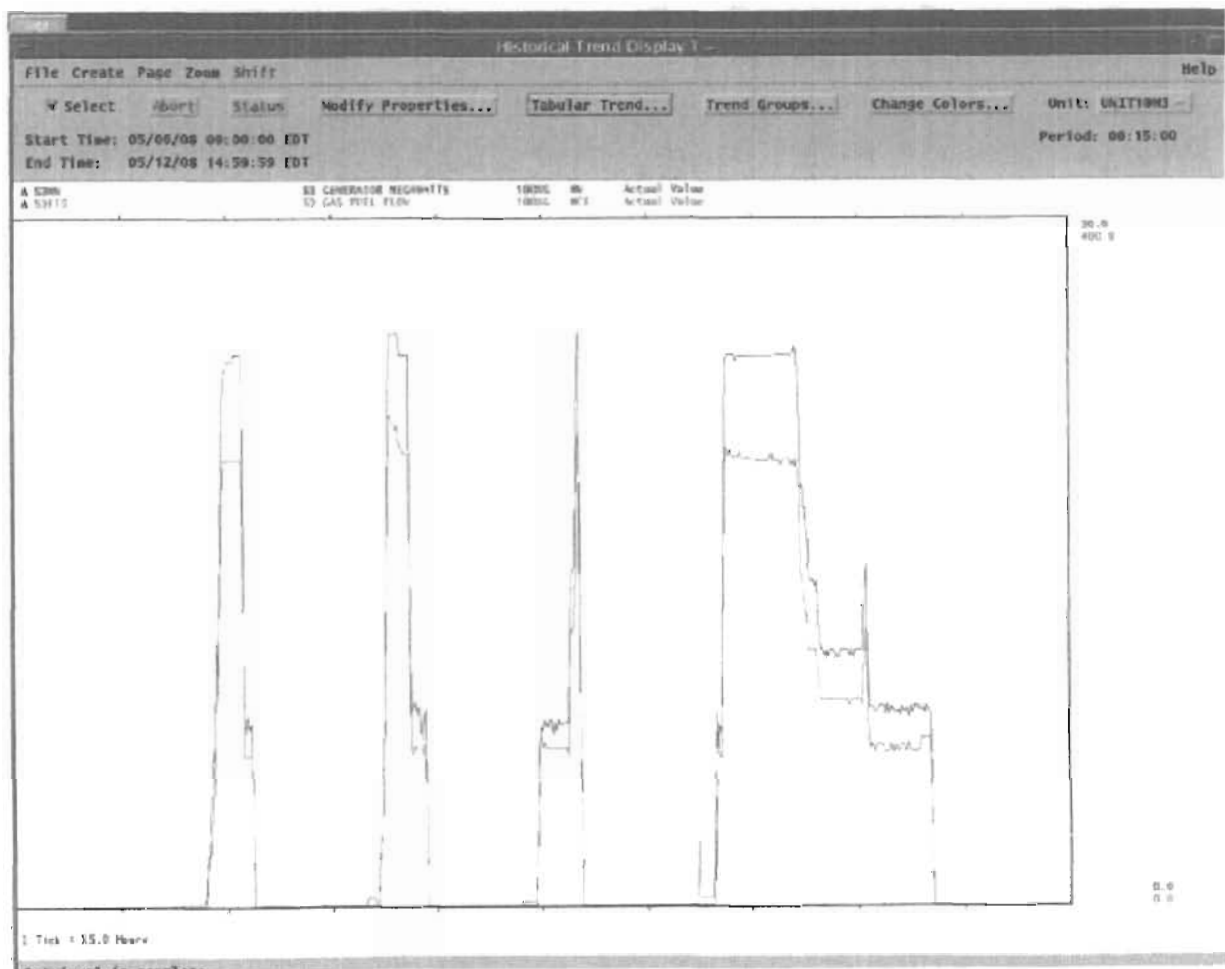
- Fuel sulfur content ≤ 2.25% by weight;
- NO_x emissions ≤ 0.50 lb/MMBtu of heat input based on a 30-day rolling average;
- Opacity ≤ 20% except for one 2-minute period/hour ≤ 40%; and
- PM emissions ≤ 0.10 lb/MMBtu of heat input.

Compliance with the maximum fuel sulfur content is demonstrated by vendor certification of each oil shipment. The unit has a continuous emissions monitoring system (CEMS) for NO_x and was in compliance with the NO_x emission standard of 0.50 lb/MMBtu of heat input prior to the failure.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Since the unit rarely fires much oil, the last opacity and PM tests were conducted in 2001, which demonstrated compliance with the applicable standards.

The following operations graph shows how Unit S-3 was typically used.



The City of Lake Worth also provided a copy of the CEMS log for May 13, 2008, which shows operation at 24 MW, which is approximately 90% of permitted capacity. Therefore, based on the information provided by the applicant, Unit S-3 was capable of operating in compliance at permitted capacity prior to the external water-wall failure.

The City of Lake Worth Utilities estimates the cost of the proposed project at approximately \$2 million for plans, materials, the rental of a de-mineralized water trailer and installation of the circulatory water-wall tubes, refractory, exterior insulation and appearance lagging. The cost for a similar new boiler with the same steam properties is estimated at \$30 to 35 million dollars. Therefore, the project is not considered reconstruction. After completing the project, the City of Lake Worth Utilities intends to operate Unit S-3 as it was just prior to the failure – as a peaking unit with limited operation.

The City of Lake Worth Utilities states that the project will not change the combustion properties of the unit, increase the maximum heat input rate or change the current dispatch criteria for the unit. The proposed project will not change the applicability of any existing state or federal requirements. The project is based on an analysis that compared projected actual emissions with baseline actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. Therefore, the draft permit requires the submittal of annual reports characterizing the actual emissions for a period of five years after completing the project pursuant to Rule 62-212.300(1)(e), F.A.C. Only NO_x, PM and SO₂ emissions are required to be reported because only these

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

pollutants are regulated and tested and are sufficient to determine whether or not a PSD significant emissions increase will occur.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Bruce Mitchell is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT PERMIT

PERMITTEE:

City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida 33461

Project No. 0990045-007-AC
Tom G. Smith Power Plant
Unit S-3 Retubing Project
SIC No. 4931

Authorized Representative:

Mr. David L Mulvay, Plant Manager

Permit Expires: December 31, 2009

PROJECT AND LOCATION

This permit authorizes the repair and replacement of water-wall tubes, refractory and associated components of the existing fossil-fuel steam generating Unit S-3 at the existing Tom G. Smith Power Plant, which is located in Palm Beach County at 117 College Street in Lake Worth, Florida. The map coordinates are UTM Zone 17, 592.8 km East and 2943.7 km North.

STATEMENT OF BASIS

This minor source air 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 project is subject to the general preconstruction review requirements of Rule 62-212.300, F.A.C. The permittee is authorized to install the proposed equipment 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).

CONTENTS

- Section I. General Information
- Section II. Administrative Requirements
- Section III. Emissions Unit Specific Conditions
- Section IV. Appendices

Executed in Tallahassee, Florida.

(DRAFT)

Joseph Kahn, Director
Division of Air Resource Management

Effective Date

SECTION 1. GENERAL INFORMATION (DRAFT)

FACILITY DESCRIPTION

The Tom G. Smith Power Plant is an existing electric power generating plant located adjacent to a potable water treatment facility. The power plant consists of: five 2000 kilowatt (kW) diesel engine generators; one fossil fuel steam generating unit (S-3); one simple cycle gas turbine unit (GT-1); and one combined cycle gas turbine unit, (GT-2/S-5). Also included in this permit are miscellaneous unregulated and insignificant emissions units and activities.

PROJECT DESCRIPTION

The purpose of the project is to repair and replace the damaged water-wall tubes and refractory of existing fossil-fuel steam generator Unit S-3. In May of 2008, Unit S-3 experienced a failure in the external water-wall releasing steam to the atmosphere. Unit S-3 is required for system security to maintain the power grid within the distribution limits of the city as the City of Lake Worth is on a radial spur from the main statewide electrical transmission grid. The unit is primarily used in a peaking load relief scenario and no longer as a base-loaded unit as originally designed. Due to the high heat rate of this unit, it typically operates only under severe weather conditions or tie line interruptions. Based on information provided by the applicant, Unit S-3 was capable of operating in compliance at permitted capacity prior to the external water-wall failure.

The proposed project will not change the applicability of any existing state or federal requirements. The project is based on an analysis that compared projected actual emissions with baseline actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. Therefore, the permit requires the submittal of annual reports characterizing the actual emissions for a period of five years after completing the project pursuant to Rule 62-212.300(1)(e), F.A.C.

REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.

SECTION II. ADMINISTRATIVE REQUIREMENTS (DRAFT)

1. **Permitting Authority:** All documents related to applications for permits to construct, operate or modify emissions unit shall be submitted to the Bureau of Air Regulation, Florida Department of Environmental Protection (Department), at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall also be submitted to the Compliance Authority.
2. **Compliance Authority:** All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department. The mailing address is P.O. Box 29, West Palm Beach, Florida 33402. The telephone number is 561/355-3136.
3. **Appendices:** The following appendices are attached as part of this permit: Appendix A (Citation Formats and Glossary), Appendix B (General Conditions) and Appendix C (Common Testing Requirements).
4. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. **Construction and Expiration:** The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid if construction is not completed within a reasonable time. The Department may extend the expiration date upon a satisfactory showing that an extension is justified. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1) and 62-212.400(12), F.A.C.]
6. **New or Additional Conditions:** For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. **Source Obligation:** At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12), F.A.C.]
8. **Modifications:** No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. This permit authorizes construction of the referenced facilities. [Chapters 62-210 and 62-212, F.A.C.]
9. **Title V Air Operation Permit:** This permit authorizes the proposed work and initial operation to determine compliance. A Title V Air Operation Permit is required for regular operation of the permitted emission units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213.420, F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS (DRAFT)

Fossil-Fuel Steam Generator Unit S-3

The specific conditions of this subsection apply to the following emission unit after the authorized work is completed.

EU ID	Emission Unit Description
009	Fossil-Fuel Steam Generating Unit S-3

CONSTRUCTION ACTIVITIES

1. Authorized Work: The permittee is authorized to perform the following work including, but not limited to, repairs, replacements and other associated work for existing Unit S-3:
 - Remove all remaining insulation and lagging from outside of boiler water-walls and steam drum;
 - Remove the water-wall tubes on the sides of the boiler;
 - Flush bottom headers with de-mineralized water;
 - Remove the water-wall roof panels from the steam drum to just below the ceiling in the wind box including removal of refractory and steel from around the superheater tube penetrations;
 - Remove steam drum internals to allow access for rolling water-wall tubes into the drum and replacing the drum internals when tube installation is completed;
 - Remove the rear water-wall tubes from the steam drum downward to the mud drum, including refractory above the mud drum so the new tubes can be rolled in the mud drum;
 - Fabricate water-wall roof panels;
 - Replace the refractory around the superheater tube penetrations on the roof panels and cover with steel plate;
 - Fabricate and install left-hand and right-hand side water-wall panels with upper headers attached;
 - Fabricate rear wall panels from the steam drum to the mud drum;
 - Install the refractory around the rear water-wall tubes between the mud drum;
 - Fabricate upper header feeder tubes from the upper header to the steam drum;
 - Replace missing baffle brick supports between tubes 6 and 7 of the superheater section at 38 feet;
 - Repair cracked firebrick found on the furnace floor;
 - Replace damaged baffle bricks in the superheater section at 36 feet;
 - Replace the refractory along the rear wall of the furnace where the superheater comes up through the furnace;
 - Re-insulate the boiler using the existing lagging; and
 - Cover the top of the boiler with expanded metal so all insulation will remain off the top of the water-wall tubes.

[Application No. 0990045-007-AC]

EMISSIONS STANDARDS

2. Existing Standards: No new emissions standards are imposed by this permit however, Unit S-3 shall continue to comply with all applicable requirements in the current Title V air operation permit. [Rules 62-4.070(3) and 62-210.300 and Chapter 62-213, F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS (DRAFT)

Fossil-Fuel Steam Generator Unit S-3

COMPLIANCE TESTING REQUIREMENTS

3. **Initial Compliance Tests:** After completing the authorized work, initial tests shall be conducted on Unit S-3 to determine compliance with the opacity and particulate matter (PM) emissions standards. The initial tests shall be conducted after the necessary shakedown and within 60 calendar days of achieving permitted capacity, but no later than 180 calendar days following first fire. The initial test shall be conducted while firing fuel oil at permitted capacity. If the unit is unable to achieve permitted capacity (maximum heat input rate) after completing the proposed work, the permit shall be modified to reflect the new maximum heat input rate. Nitrogen oxides (NO_x) data collected from the existing continuous emissions monitoring system (CEMS) shall be reported for each PM test run. Sulfur dioxide (SO₂) emissions for each PM test run shall be calculated and reported based on the fuel sulfur content as determined by the methods established in the current Title V air operation permit. [Rule 62-4.070(3), F.A.C.]
4. **Subsequent Tests:** Subsequent emissions compliance tests shall be conducted on Unit S-3 to determine compliance with the opacity and particulate matter emissions standards in accordance with the testing frequency established in the current Title V air operation permit. [Rule 62-4.070(3), F.A.C.]
5. **Testing Requirements:** All emissions tests shall be conducted in accordance with the requirements specified in the current Title V air operation permit. In addition, the requirements specified in Appendix C (Common Testing Requirements) of this permit shall be used for all notifications, tests and reports. [Rules 62-297.100 and 62-297.310, F.A.C.; and Appendix A of 40 CFR 60]

REPORTING AND RECORDKEEPING REQUIREMENTS

6. **Test Reports:** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix C (Common Testing Requirements) of this permit. Each test report shall also identify the heat input rate (MMBtu/hour) and power generation (MW) for each test run. [Rules 62-297.310(8), F.A.C. and 62-297.310, F.A.C.]
7. **Fuel Usage:** The permittee shall continuously monitor and record the use of each fuel. Records shall be available for inspection and printing within at least three days of a request by the Department and may be stored as an electronic file. [Rule 62-4.070(3), F.A.C.]
8. **Projected Actual Emissions Calculations:** For the first five years after completing the authorized work on Unit S-3, the permittee shall submit an annual report that summarizes the projected actual emissions for NO_x, PM and SO₂ in accordance with the provisions of Rule 62-212.300(1)(e), F.A.C. [Rules 62-4.070(3), 62-210.200(Definitions), 62-210.370 and 62-212.300(1)(e), F.A.C.]
9. **Actual Emissions Reporting:** This permit is based on an analysis that compared projected actual emissions with baseline actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
 - a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Condition 15 of this permit.
 - b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - 1) The name, address and telephone number of the owner or operator of the major stationary source;

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS (DRAFT)

Fossil-Fuel Steam Generator Unit S-3

- 2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Condition 15 of this permit;
 - 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - 4) Any other information that the owner or operator wishes to include in the report.
- c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

For this project, the Department requires the annual reporting of actual emissions for NO_x, PM and SO₂ emissions.

[Application 0990045-007-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

SECTION IV. APPENDICES
CONTENTS

Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

Appendix C. Common Testing Requirements

SECTION IV. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit
“AO” identifies the permit as an Air Operation Permit
“123456” identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number for that county
“001” identifies the specific permit project number
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor source federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

ARMS: Air Resource Management System
(Department’s database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CO: carbon monoxide

CO₂: carbon dioxide

SECTION IV. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

COMS: continuous opacity monitoring system	NESHAP: National Emissions Standards for Hazardous Air Pollutants
DEP: Department of Environmental Protection	NOx: nitrogen oxides
Department: Department of Environmental Protection	NSPS: New Source Performance Standards
dscfm: dry standard cubic feet per minute	O&M: operation and maintenance
EPA: Environmental Protection Agency	O₂: oxygen
ESP: electrostatic precipitator (control system for reducing particulate matter)	Pb: lead
EU: emissions unit	PM: particulate matter
F.A.C.: Florida Administrative Code	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
F.D.: forced draft	PSD: prevention of significant deterioration
F.S.: Florida Statutes	psi: pounds per square inch
FGR: flue gas recirculation	PTE: potential to emit
Fl: fluoride	RACT: reasonably available control technology
ft²: square feet	RATA: relative accuracy test audit
ft³: cubic feet	SAM: sulfuric acid mist
gpm: gallons per minute	scf: standard cubic feet
gr: grains	scfm: standard cubic feet per minute
gr/dscf: grains per dry standard cubic feet	SIC: standard industrial classification code
HAP: hazardous air pollutant	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
Hg: mercury	SO₂: sulfur dioxide
HHV: higher heating value	TPH: tons per hour
I.D.: induced draft	TPY: tons per year
ID: identification	UTM: Universal Transverse Mercator coordinate system
kPa: kilopascals	VE: visible emissions
lb: pound	VOC: volatile organic compounds
MACT: maximum achievable technology	
MMBtu: million British thermal units	
MSDS: material safety data sheets	
MW: megawatt	

SECTION IV. APPENDIX B
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence

SECTION IV. APPENDIX B
GENERAL CONDITIONS

shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
11. This permit is transferable only upon Department approval in accordance with Rules 624.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (applicable);
 - b. Determination of Prevention of Significant Deterioration (applicable); and
 - c. Compliance with New Source Performance Standards (applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

COMPLIANCE TESTING REQUIREMENTS

1. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
2. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
3. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
4. Applicable Test Procedures
 - a. *Required Sampling Time*.
 - (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - (c) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
 - b. *Minimum Sample Volume*. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

- c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.
- d. *Allowed Modification to EPA Method 5.* When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

5. Determination of Process Variables

- a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

6. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- c. *Sampling Ports.*
 - (1) All sampling ports shall have a minimum inside diameter of 3 inches.
 - (2) The ports shall be capable of being sealed when not in use.
 - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

d. *Work Platforms.*

- (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
- (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
- (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
- (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

e. *Access to Work Platform.*

- (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.

f. *Electrical Power.*

- (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
- (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

g. *Sampling Equipment Support.*

- (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket
- (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

7. Frequency of Compliance Tests: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

a. *General Compliance Testing.*

1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - (a) Did not operate; or
 - (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,
 4. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - (a) Visible emissions, if there is an applicable standard;
 - (b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - (c) c. Each NESHAP pollutant, if there is an applicable emission standard.
 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
 6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.
 7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- b. *Special Compliance Tests.* When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

- c. *Waiver of Compliance Test Requirements.* If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of paragraph 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

8. Test Reports:

- a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.
 1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 8. The date, starting time and duration of each sampling run.
 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 10. The number of points sampled and configuration and location of the sampling plane.
 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 12. The type, manufacturer and configuration of the sampling equipment used.
 13. Data related to the required calibration of the test equipment.
 14. Data on the identification, processing and weights of all filters used.
 15. Data on the types and amounts of any chemical solutions used.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Tuesday, April 28, 2009 1:10 PM
To: 'dmulvay@lakeworth.org'
Cc: 'mridge@lakeworth.org'; 'ken_kosky@golder.com'; 'sal_mohammad@golder.com'; 'james_stormer@doh.state.fl.us'; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: Lake Worth Utilities - TOM G. SMITH PWR PLANT; 0990045-007-AC
Attachments: 0990045-007-AC_Intent.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990045.007.AC.D_pdf.zip

Owner/Company Name: CITY OF LAKE WORTH UTILITIES
Facility Name: L.W. UTILITIES / TOM G. SMITH PWR PLANT
Project Number: 0990045-007-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: PALM BEACH
Processor: Bruce Mitchell

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp> .

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <<http://www.adobe.com/products/acrobat/readstep.html>> .

Livingston, Sylvia

From: Michael Ridge [MRidge@LakeWorth.org]
Sent: Friday, May 01, 2009 10:45 AM
To: Livingston, Sylvia
Subject: RE: Lake Worth Utilities - TOM G. SMITH PWR PLANT; 0990045-007-AC

Thanks Sylvia!

Mike Ridge
Env/Perf Spec.
CLWU
561-533-7379
mridge@lakeworth.org

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Tuesday, April 28, 2009 1:10 PM
To: Dave Mulvay
Cc: Michael Ridge; ken_kosky@golder.com; sal_mohammad@golder.com; james_stormer@doh.state.fl.us; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: Lake Worth Utilities - TOM G. SMITH PWR PLANT; 0990045-007-AC

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Facility Name: L.W. UTILITIES / TOM G. SMITH PWR PLANT
Project Number: 0990045-007-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: PALM BEACH
Processor: Bruce Mitchell

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp> .

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Wednesday, May 06, 2009 9:56 AM
To: 'dmulvay@lakeworth.org'
Subject: FW: Lake Worth Utilities - TOM G. SMITH PWR PLANT; 0990045-007-AC
Attachments: 0990045-007-AC_Intent.pdf

Dear Mr. Mulvay,

We have not received confirmation that you were able to access the documents attached to this April 28th e-mail, as well as the documents provided in the link (http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990045.007.AC.D_pdf.zip) referenced in the email. Please confirm receipt by opening the attachment and clicking on the link to the permit documents, and sending a reply to me.

The Division of Air Resource Management is sending electronic versions of these documents rather than sending them Return Receipt Requested via the US Postal service. Your "receipt confirmation" reply serves the same purpose as tracking the receipt of the signed "Return Receipt" card from the US Postal Service. Please let me know if you have any questions.

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

From: Livingston, Sylvia
Sent: Tuesday, April 28, 2009 1:10 PM
To: 'dmulvay@lakeworth.org'
Cc: 'mridge@lakeworth.org'; 'ken_kosky@golder.com'; 'sal_mohammad@golder.com'; 'james_stormer@doh.state.fl.us'; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: Lake Worth Utilities - TOM G. SMITH PWR PLANT; 0990045-007-AC

Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990045.007.AC.D_pdf.zip

Owner/Company Name: CITY OF LAKE WORTH UTILITIES
Facility Name: L.W. UTILITIES / TOM G. SMITH PWR PLANT
Project Number: 0990045-007-AC

Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: PALM BEACH
Processor: Bruce Mitchell

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp> .

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <<http://www.adobe.com/products/acrobat/readstep.html>> .

Livingston, Sylvia

From: Dave Mulvay [DMulvay@LakeWorth.org]
To: Livingston, Sylvia
Sent: Wednesday, May 06, 2009 11:52 AM
Subject: Read: FW: Lake Worth Utilities - TOM G. SMITH PWR PLANT; 0990045-007-AC

Your message

To: DMulvay@LakeWorth.org
Subject:

was read on 5/6/2009 11:52 AM.

Livingston, Sylvia

From: Michael Ridge [MRidge@LakeWorth.org]
Sent: Wednesday, May 13, 2009 12:38 PM
To: Livingston, Sylvia
Subject: ac0990045-007-AC

Hi Sylvia.

Sorry, I thought I had downloaded and saved them already. Have them now.

Thanks

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Fossil-Fuel Steam Generator Unit S-3

The specific conditions of this subsection apply to the following emission unit after the authorized work is completed.

EU ID	Emission Unit Description
009	Fossil-Fuel Steam Generating Unit S-3

CONSTRUCTION ACTIVITIES

1. Authorized Work: The permittee is authorized to perform the following work including, but not limited to, repairs, replacements and other associated work for existing Unit S-3:
 - Remove all remaining insulation and lagging from outside of boiler water-walls and steam drum;
 - Remove the water-wall tubes on the sides of the boiler;
 - Flush bottom headers with de-mineralized water;
 - Remove the water-wall roof panels from the steam drum to just below the ceiling in the wind box including removal of refractory and steel from around the superheater tube penetrations;
 - Remove steam drum internals to allow access for rolling water-wall tubes into the drum and replacing the drum internals when tube installation is completed;
 - Remove the rear water-wall tubes from the steam drum downward to the mud drum, including refractory above the mud drum so the new tubes can be rolled in the mud drum;
 - Fabricate water-wall roof panels;
 - Replace the refractory around the superheater tube penetrations on the roof panels and cover with steel plate;
 - Fabricate and install left-hand and right-hand side water-wall panels with upper headers attached;
 - Fabricate rear wall panels from the steam drum to the mud drum;
 - Install the refractory around the rear water-wall tubes between the mud drum;
 - Fabricate upper header feeder tubes from the upper header to the steam drum;
 - Replace missing baffle brick supports between tubes 6 and 7 of the superheater section at 38 feet;
 - Repair cracked firebrick found on the furnace floor;
 - Replace damaged baffle bricks in the superheater section at 36 feet;
 - Replace the refractory along the rear wall of the furnace where the superheater comes up through the furnace;
 - Re-insulate the boiler using the existing lagging; and
 - Cover the top of the boiler with expanded metal so all insulation will remain off the top of the water-wall tubes.

[Application No. 0990045-007-AC]

EMISSIONS STANDARDS

2. Existing Standards: No new emissions standards are imposed by this permit however, Unit S-3 shall continue to comply with all applicable requirements in the current Title V air operation permit. [Rules 62-4.070(3) and 62-210.300 and Chapter 62-213, F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Fossil-Fuel Steam Generator Unit S-3

COMPLIANCE TESTING REQUIREMENTS

3. Initial Compliance Tests: After completing the authorized work, initial tests shall be conducted on Unit S-3 to determine compliance with the opacity and particulate matter (PM) emissions standards. The initial tests shall be conducted after the necessary shakedown and within 60 calendar days of achieving permitted capacity, but no later than 180 calendar days following first fire. The initial test shall be conducted while firing fuel oil at permitted capacity. If the unit is unable to achieve permitted capacity (maximum heat input rate) after completing the proposed work, the permit shall be modified to reflect the new maximum heat input rate. Nitrogen oxides (NO_x) data collected from the existing continuous emissions monitoring system (CEMS) shall be reported for each PM test run. Sulfur dioxide (SO₂) emissions for each PM test run shall be calculated and reported based on the fuel sulfur content as determined by the methods established in the current Title V air operation permit. [Rule 62-4.070(3), F.A.C.]
4. Subsequent Tests: Subsequent emissions compliance tests shall be conducted on Unit S-3 to determine compliance with the opacity and particulate matter emissions standards in accordance with the testing frequency established in the current Title V air operation permit. [Rule 62-4.070(3), F.A.C.]
5. Testing Requirements: All emissions tests shall be conducted in accordance with the requirements specified in the current Title V air operation permit. In addition, the requirements specified in Appendix C (Common Testing Requirements) of this permit shall be used for all notifications, tests and reports. [Rules 62-297.100 and 62-297.310, F.A.C.; and Appendix A of 40 CFR 60]

REPORTING AND RECORDKEEPING REQUIREMENTS

6. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix C (Common Testing Requirements) of this permit. Each test report shall also identify the heat input rate (MMBtu/hour) and power generation (MW) for each test run. [Rules 62-297.310(8), F.A.C. and 62-297.310, F.A.C.]
7. Fuel Usage: The permittee shall continuously monitor and record the use of each fuel. Records shall be available for inspection and printing within at least three days of a request by the Department and may be stored as an electronic file. [Rule 62-4.070(3), F.A.C.]
8. Projected Actual Emissions Calculations: For the first five years after completing the authorized work on Unit S-3, the permittee shall submit an annual report that summarizes the projected actual emissions for NO_x, PM and SO₂ in accordance with the provisions of Rule 62-212.300(1)(e), F.A.C. [Rules 62-4.070(3), 62-210.200(Definitions), 62-210.370 and 62-212.300(1)(e), F.A.C.]
9. Actual Emissions Reporting: This permit is based on an analysis that compared projected actual emissions with baseline actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
 - a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Condition 15 of this permit.
 - b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - 1) The name, address and telephone number of the owner or operator of the major stationary source;

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Fossil-Fuel Steam Generator Unit S-3

- 2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Condition 15 of this permit;
 - 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - 4) Any other information that the owner or operator wishes to include in the report.
- c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

For this project, the Department requires the annual reporting of actual emissions for NO_x, PM and SO₂ emissions.

[Application 0990045-007-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

SECTION IV. APPENDICES
CONTENTS

- Appendix A. Citation Formats and Glossary of Common Terms
- Appendix B. General Conditions
- Appendix C. Common Testing Requirements

SECTION IV. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit
“AO” identifies the permit as an Air Operation Permit
“123456” identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number for that county
“001” identifies the specific permit project number
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor source federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

ARMS: Air Resource Management System
(Department’s database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CO: carbon monoxide

CO₂: carbon dioxide

SECTION IV. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

COMS: continuous opacity monitoring system	NESHAP: National Emissions Standards for Hazardous Air Pollutants
DEP: Department of Environmental Protection	NO_x: nitrogen oxides
Department: Department of Environmental Protection	NSPS: New Source Performance Standards
dscfm: dry standard cubic feet per minute	O&M: operation and maintenance
EPA: Environmental Protection Agency	O₂: oxygen
ESP: electrostatic precipitator (control system for reducing particulate matter)	Pb: lead
EU: emissions unit	PM: particulate matter
F.A.C.: Florida Administrative Code	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
F.D.: forced draft	PSD: prevention of significant deterioration
F.S.: Florida Statutes	psi: pounds per square inch
FGR: flue gas recirculation	PTE: potential to emit
Fl: fluoride	RACT: reasonably available control technology
ft²: square feet	RATA: relative accuracy test audit
ft³: cubic feet	SAM: sulfuric acid mist
gpm: gallons per minute	scf: standard cubic feet
gr: grains	scfm: standard cubic feet per minute
gr/dscf: grains per dry standard cubic feet	SIC: standard industrial classification code
HAP: hazardous air pollutant	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
Hg: mercury	SO₂: sulfur dioxide
HHV: higher heating value	TPH: tons per hour
I.D.: induced draft	TPY: tons per year
ID: identification	UTM: Universal Transverse Mercator coordinate system
kPa: kilopascals	VE: visible emissions
lb: pound	VOC: volatile organic compounds
MACT: maximum achievable technology	
MMBtu: million British thermal units	
MSDS: material safety data sheets	
MW: megawatt	

SECTION IV. APPENDIX B
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence

SECTION IV. APPENDIX B
GENERAL CONDITIONS

shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (applicable);
 - b. Determination of Prevention of Significant Deterioration (applicable); and
 - c. Compliance with New Source Performance Standards (applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

COMPLIANCE TESTING REQUIREMENTS

1. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
2. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
3. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
4. Applicable Test Procedures
 - a. Required Sampling Time.
 - (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - (c) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
 - b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

- c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.
- d. *Allowed Modification to EPA Method 5.* When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

5. Determination of Process Variables

- a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

6. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- c. *Sampling Ports.*
 - (1) All sampling ports shall have a minimum inside diameter of 3 inches.
 - (2) The ports shall be capable of being sealed when not in use.
 - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

d. *Work Platforms.*

- (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
- (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
- (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
- (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

e. *Access to Work Platform.*

- (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.

f. *Electrical Power.*

- (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
- (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

g. *Sampling Equipment Support.*

- (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
- (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

7. **Frequency of Compliance Tests:** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

a. *General Compliance Testing.*

1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - (a) Did not operate; or
 - (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,
 4. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - (a) Visible emissions, if there is an applicable standard;
 - (b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - (c) c. Each NESHAP pollutant, if there is an applicable emission standard.
 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
 6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.
 7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- b. *Special Compliance Tests.* When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

- c. *Waiver of Compliance Test Requirements.* If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of paragraph 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

8. Test Reports:

- a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.
 1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 8. The date, starting time and duration of each sampling run.
 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 10. The number of points sampled and configuration and location of the sampling plane.
 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 12. The type, manufacturer and configuration of the sampling equipment used.
 13. Data related to the required calibration of the test equipment.
 14. Data on the identification, processing and weights of all filters used.
 15. Data on the types and amounts of any chemical solutions used.

SECTION 4. APPENDIX C
COMMON TESTING REQUIREMENTS

16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Wednesday, June 10, 2009 4:45 PM
To: 'dmulvay@lakeworth.org'
Cc: 'mridge@lakeworth.org'; 'ken_kosky@golder.com'; 'sal_mohammad@golder.com'; 'james_stormer@doh.state.fl.us'; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: City of Lake Worth - L.W. UTILITIES / TOM G. SMITH PWR PLANT; 0990045-007-AC
Attachments: 0990045-007-AC_Signatures.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990045.007.AC.F_pdf.zip

Owner/Company Name: CITY OF LAKE WORTH UTILITIES
Facility Name: L.W. UTILITIES / TOM G. SMITH PWR PLANT
Project Number: 0990045-007-AC
Permit Status: FINAL
Permit Activity: CONSTRUCTION/ REPLACE WATER WALL TUBES EU009
Facility County: PALM BEACH
Processor: Bruce Mitchell

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

Project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>.

Livingston, Sylvia

From: Dave Mulvay [DMulvay@LakeWorth.org]
To: undisclosed-recipients
Sent: Wednesday, June 10, 2009 4:48 PM
Subject: Read: City of Lake Worth - L.W. UTILITIES / TOM G. SMITH PWR PLANT; 0990045-007-AC

Your message

To: DMulvay@Lakeworth.org
Subject:

was read on 6/10/2009 4:48 PM.

Livingston, Sylvia

From: Michael Ridge [MRidge@LakeWorth.org]
Sent: Thursday, June 11, 2009 8:09 AM
To: Livingston, Sylvia
Subject: RE: City of Lake Worth - L.W. UTILITIES / TOM G. SMITH PWR PLANT; 0990045-007-AC

Thanks Sylvia!

Mike Ridge
Env/Perf Spec.
CLWU
561-533-7379
mr ridge@lakeworth.org

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Wednesday, June 10, 2009 4:45 PM
To: Dave Mulvay
Cc: Michael Ridge; ken_kosky@golder.com; sai_mohammad@golder.com; james_stormer@doh.state.fl.us; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: City of Lake Worth - L.W. UTILITIES / TOM G. SMITH PWR PLANT; 0990045-007-AC

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990045.007.AC.F_pdf.zip

Owner/Company Name: CITY OF LAKE WORTH UTILITIES
Facility Name: L.W. UTILITIES / TOM G. SMITH PWR PLANT
Project Number: 0990045-007-AC
Permit Status: FINAL
Permit Activity: CONSTRUCTION/ REPLACE WATER WALL TUBES EU009
Facility County: PALM BEACH
Processor: Bruce Mitchell

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

THE PALM BEACH POST
Published Daily and Sunday
West Palm Beach, Palm Beach County, Florida

NO. 4353042
Florida Department of
Environmental Protection
Division of Air Resource Management,
Bureau of Air Regulation
Project No. 0990045-007-AC
City of Lake Worth Utilities
Tom G. Smith Power Plant
Palm Beach County, Florida

PROOF OF PUBLICATION

STATE OF FLORIDA
COUNTY OF PALM BEACH

Before the undersigned authority personally appeared Janet Taylor Fisher, who on oath says that she is Classified Call Center Manager 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 for a Notice in the matter of DEP Project #0990045-007-AC was published in said newspaper in the issues of May 6, 2009. 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. Also published in Martin and St. Lucie Counties.

Sworn to and subscribed before 6th day of May, A.D. 2009.
Who is personally known to me.

NOTARY PUBLIC-STATE OF FLORIDA
Karen M. McLinton
Commission # DD832672
Expires: NOV. 15, 2012
BONDED THRU ATLANTIC BONDING CO., INC.

RECEIVED

MAY 15 2009

BUREAU OF AIR REGULATION

RECEIVED
MAY - 7 2009
UTILITIES ADMINISTRATION

Applicant: The applicant for this project is the City of Lake Worth Utilities. The applicant's authorized representative and mailing address is: Mr. David L. Mulvey, Plant Manager, City of Lake Worth Utilities, Tom G. Smith Power Plant, 1900 2nd Avenue North, Lake Worth, Florida 33461.
Facility Location: The City of Lake Worth Utilities operates an existing electric utility, the Tom G. Smith Power Plant, located at 117 College Street in Lake Worth, Palm Beach County, Florida.
Project: The primary purpose of the proposed project is to replace damaged water-wall tubes and refractory of existing fossil-fuel steam generator Unit 5-3. This emissions unit is required for system security to maintain the power grid within the City of Lake Worth distribution limits as the City of Lake Worth is on a radial spur from the main statewide electrical transmission grid. It is currently used as a peaking unit. The project will not change the combustion properties of the unit, increase the unit capacity or the current dispatch criteria for the unit.
The project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration because there will not be significant net emissions increases of any criteria pollutant. This analysis is based on comparison baseline actual emissions with projected actual emissions. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project. The project is considered a minor modification to a major stationary source.
Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0144.
Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays) at the address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.11, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: www.dep.state.fl.us/air/products/apds/default.asp.
Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurances that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.
Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.
Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 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 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.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 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 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 (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (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 including an explanation of how the alleged facts relate to the specific rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Permitting Authority'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 Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

PUB: The Palm Beach Post
May 6, 2009

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 **Janet Taylor Fisher**, who on oath says that she is **Classified Call Center Manager** 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 for a **Notice** in the matter of **DEP Project #0990045-007-AC** was published in said newspaper in the issues of **May 6, 2009**. 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. Also published in Martin and St. Lucie Counties.

Sworn to and subscribed before 6th day of May, A.D. 2009.
Who is personally known to me.

NOTARY PUBLIC-STATE OF FLORIDA
Karen M. McLinton
Commission # DD832672
Expires: NOV. 15, 2012
BONDED THRU ATLANTIC BONDING CO., INC.

RECEIVED

MAY 15 2009

BUREAU OF AIR REGULATION

RECEIVED
MAY - 7 2009
UTILITIES ADMINISTRATION

NO. 4353042
Florida Department of
Environmental Protection
Division of Air Resource Management,
Bureau of Air Regulation
Project No. 0990045-007-AC
City of Lake Worth Utilities -
Tom G. Smith Power Plant
Palm Beach County, Florida

Applicant: The applicant for this project is the City of Lake Worth Utilities. The applicant's authorized representative and mailing address is: Mr. David L. Mulvey, Plant Manager, City of Lake Worth Utilities, Tom G. Smith Power Plant, 1900 2nd Avenue North, Lake Worth, Florida 33461.

Facility Location: The City of Lake Worth Utilities operates an existing electric utility, the Tom G. Smith Power Plant, located at 117 College Street in Lake Worth, Palm Beach County, Florida.

Project: The primary purpose of the proposed project is to replace damaged water-wall tubes and refractory of existing fossil-fuel steam generator Unit S-3. This emissions unit is required for system security to maintain the power grid within the City of Lake Worth distribution limits as the City of Lake Worth is on a radial spur from the main statewide electrical transmission grid. It is currently used as a peaking unit. The project will not change the combustion properties of the unit, increase the unit capacity or the current dispatch criteria for the unit.

The project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration because there will not be significant net emissions increases of any criteria pollutant. This analysis is based on comparison baseline actual emissions with projected actual emissions. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project. The project is considered a minor modification to a major stationary source.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site:
www.dep.statefl.us/air/e/products/apds/default.asp

Administrative stamps and routing marks on the right side of the document, including a date stamp 'MAY 15 2009' and various initials and department names.

Notice of Intent to Issue Air Permit. The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 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 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 (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (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 including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Permitting Authority'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 Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.
PUB: The Palm Beach Post
May 6, 2009

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Tuesday, January 27, 2009 3:22 PM
To: 'forney.kathleen@epa.gov'
Cc: 'James_Stormer@doh.state.fl.us'; Mitchell, Bruce; Walker, Elizabeth (AIR)

A new **Permit Application** has been received in Florida and is currently under review.

Link to Permit Application Documents:

<http://arm-permit2k.dep.state.fl.us/psd/0990045/00003621.pdf>

ARMS PA Project ID:	0990045-007-AC
Facility Name:	Lake Worth Utilities
Florida County:	PALM BEACH
Project Description:	REPLACE WATER WALL TUBES EU009
Permit Application Processor:	Bruce Mitchell
Processor Phone:	(850)413-9198
Processor Email Address:	Bruce.Mitchell@dep.state.fl.us
Received in-house:	1/22/09

Or, Search for other Air Permit Documents on [Florida's Air Permit Documents Search](#).

Please direct any questions regarding this permit application to the permit application processor. If you have any problems accessing these documents please let me know.

Thanks,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

February 16, 2009

Sent by Electronic Mail – Received Receipt Requested

Mr. David Mulvay, Authorized Representative
City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, Florida 33461

Re: Request for Additional Information
Project No. 0990045-007-AC
Tom G. Smith Power Plant
Authorization to Re-tube Fossil Fuel Steam Generator Unit 3

Dear Mr. Mulvay:

On January 22, 2009, we received your application and sufficient fee for an air construction permit to re-tube the fossil fuel steam generator Unit 3 at the existing Tom G. Smith Power Plant due to external tube failures that occurred in May 2008. The facility is located in Palm Beach County at 117 College Street in Lake Worth, Florida. The application indicates that the project is subject to general preconstruction review pursuant to Rule 62-210.300 of the Florida Administrative Code (F.A.C.). The application is incomplete. In order to continue processing your application, please provide the additional information requested below. Should your response to any of the requested items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Provide an analysis of the baseline actual pollutant emissions with the projected actual or potential pollutant emissions.
2. When was the last compliance test conducted between 90 to 100 percent (%) of the permitted capacity of 325.1 million British thermal units (MMBtu) per hour? What were the results of the compliance test? Please provide a synopsis of the test results and include the heat input during each test performed. The Air Resource Management System (ARMS) data system shows the last compliance test to have been conducted on June 9, 2003, for nitrogen oxides (NOx) and the heat input was 131 MMBtu, which is only 40.3% of the permitted capacity of Unit 3.
3. Provide a synopsis of the pollutant compliance tests conducted on Unit 3 for the last ten years and include the heat input during each test performed.
4. Provide a detailed description of the actual work that will be performed on Unit 3. When is the work planned to be conducted?
5. Will the proposed re-tubing allow Unit 3 to regain lost capacity?
6. Provide any current operational data showing operation at permitted capacity.

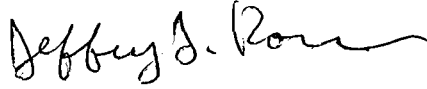
The above information is requested pursuant to the following F.A.C. regulations: Rule 62-4.050 (Procedures to Obtain Permits and Other Authorizations; Applications); 62-4.055 (Permit Processing); 62-4.070 (Standards for Issuing or Denying Permits; Issuance; Denial); 62-4.120 (Construction Permits); 62-204.800 (Federal Regulations Adopted by Reference); 62-212.300 (Permits Required); 62-210.370 (Emissions Computations and Reporting); 62-210.900 (Forms and Instructions); 62-212.300 (General Preconstruction review); and 62-212.400 (Preventions of Significant Deterioration). All applications for a Department permit must be certified by a professional engineer registered in the State of Florida pursuant to Rule 62-4.050(3), F.A.C. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official.

We will resume processing your application after receipt of the requested information. You are reminded that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days or to provide a written request for an

REQUEST FOR ADDITIONAL INFORMATION

additional period of time to submit the information. If you have any questions regarding this matter, please contact the project engineer, Bruce Mitchell, at (850)413-9198.

Sincerely,



Jeffery F. Koerner, Administrator
New Source Review Section

This letter was sent to the following people by electronic mail with received receipt requested.

cc: Mr. David Mulvay, Authorized Representative, City of Lake Worth Utilities (dmulvay@lakeworth.org)
Mr. Mike Ridge, Application Contact, City of Lake Worth Utilities (mridge@lakeworth.org)
Mr. Kennard F. Kosky, P.E., Golder Associates, Inc. (kkosky@golder.com)
Mr. James Stormer, Palm Beach County Health Department (james_stormer@doh.state.fl.us)
Mr. Lennon Anderson, Southeast District Office (lennon.anderson@dep.state.fl.us)
Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

JFK/rbm

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Monday, February 16, 2009 2:49 PM
To: 'dmulvay@lakeworth.org'
Cc: 'mridge@lakeworth.org'; 'kkosky@golder.com'; 'james_stormer@doh.state.fl.us'; Anderson, Lennon; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)
Attachments: 0990045-007-AC.pdf

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software, *noting that you can view the documents*, and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html> .

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Livingston, Sylvia

From: Michael Ridge [MRidge@LakeWorth.org]
Sent: Tuesday, February 24, 2009 9:22 AM
To: Livingston, Sylvia
Subject: RE: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

Responding for Dave Mulvay

Mike Ridge
Env/Perf Spec.
CLWU
561-533-7379
mr ridge@lakeworth.org

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Monday, February 16, 2009 2:49 PM
To: Dave Mulvay
Cc: Michael Ridge; kkosky@golder.com; james_stormer@doh.state.fl.us; Anderson, Lennon; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

Dear Sir/Madam:

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Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Livingston, Sylvia

From: Michael Ridge [MRidge@LakeWorth.org]
Sent: Monday, February 16, 2009 2:54 PM
To: Livingston, Sylvia
Subject: RE: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

Mike Ridge
Env/Perf Spec.
CLWU
561-533-7379
mridge@lakeworth.org

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Monday, February 16, 2009 2:49 PM
To: Dave Mulvay
Cc: Michael Ridge; kkosky@golder.com; james_stormer@doh.state.fl.us; Anderson, Lennon; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

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Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software, *noting that you can view the documents*, and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

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Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Livingston, Sylvia

From: Laxmana Tallam@doh.state.fl.us
Sent: Monday, February 16, 2009 3:19 PM
To: Livingston, Sylvia
Subject: RE: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

Document received.

~Laxmana

Laxmana Tallam, PE
Palm Beach County Health Department
561-355-3136 ext 1142

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Monday, February 16, 2009 3:10 PM
To: Tallam, Laxmana
Cc: Walker, Elizabeth (AIR)
Subject: FW: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Livingston, Sylvia
Sent: Monday, February 16, 2009 2:49 PM
To: 'dmulvay@lakeworth.org'
Cc: 'mridge@lakeworth.org'; 'kkosky@golder.com'; 'james_stormer@doh.state.fl.us'; Anderson, Lennon; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

Dear Sir/Madam:

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Thank you,

Livingston, Sylvia

From: Anderson, Lennon
Sent: Tuesday, April 07, 2009 1:10 PM
To: Livingston, Sylvia
Subject: RE: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

Thanks!

From: Livingston, Sylvia
Sent: Monday, February 16, 2009 2:49 PM
To: 'dmulvay@lakeworth.org'
Cc: 'mridge@lakeworth.org'; 'kkosky@golder.com'; 'james_stormer@doh.state.fl.us'; Anderson, Lennon; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)
Subject: RAI -0990045-007-AC (City of Lake worth Utilities - Tom G. Smith Power Plant)

Dear Sir/Madam:

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The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Golder Associates Inc.

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



March 18, 2009

Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Attention: Mr. Jeffery F. Koerner, Administrator

0938-7554
RECEIVED
MAR 19 2009
BUREAU OF AIR REGULATION

**RE: REQUEST FOR ADDITIONAL INFORMATION
PROJECT NO. 0990045-007-AC
TOM G. SMITH POWER PLANT
AUTHORIZATION TO RE-TUBE FOSSIL FUEL STEAM GENERATOR UNIT 3**

Dear Mr. Koerner:

City of Lake Worth Utilities, Inc. (CLWU) has received a request for additional information (RAI) from the Florida Department of Environmental Protection (FDEP) dated February 16, 2009, regarding the construction permit application for replacement of water-wall tubes of the fossil fuel-fired steam generator Unit 3 at the Tom G. Smith Power Plant. Each of FDEP's requests is answered below, in the same order as they appear in the RAI letter.

Comment 1. Provide an analysis of the baseline actual pollutant emissions with the projected actual or potential pollutant emissions.

Response: An analysis to compare baseline actual versus future projected actual emissions has been prepared and presented in attached Tables 1 through 6. The actual annual emissions for the 5 years prior to the unit failure are calculated in Tables 1 and 2 for natural gas- and fuel oil-firing, respectively. The period chosen is May to April of each year because the unit failed in May of 2008. Table 3 presents the 2-year average actual emissions. Future projected actual emissions are presented in Tables 4 and 5 for natural gas- and fuel oil-firing, respectively. A Prevention of Significant Deterioration (PSD) applicability analysis is presented in Table 6.

Based on the difference of the projected actual and baseline actual emissions, the net changes in emissions are less than the PSD significant emission rates; therefore, the Unit 3 re-tubing project is not subject to PSD review.

Comment 2. When was the last compliance test conducted between 90 to 100 percent (%) of the permitted capacity of 325.1 million British thermal units (MMBtu) per hour? What were the results of the compliance test? Please provide a synopsis of the test results and include the heat input during each test performed. The Air Resource Management System (ARMS) data system shows the last compliance test to have been conducted on June 9, 2003, for nitrogen oxides (NOx) and the heat input was 131 MMBtu, which is only 40.3% of the permitted capacity of Unit 3.

Response: The last compliance test conducted between 90- and 100-percent of the permitted heat input rate of 325.1 MMBtu/hr was in November 2001. The testing was for particulate matter (PM) with a measured value of 0.025 pound per MMBtu of PM emissions. Based on available data, power output during the test was approximately 25 megawatts, which is equivalent to 312.5 MMBtu/hr of heat input

(96 percent of permitted capacity) using a heat rate of 12,500 British thermal units per kilowatt-hour. Please note that compliance testing is only required for PM and visible (VE) emissions from Unit 3 and only if oil-firing is for 400 hours or more per year (Sections C.10., E.6., and E.7. of Title V Permit No. 0990045-005-AV).

The test conducted on June 9, 2003, was a reasonable accuracy test audit for the NO_x continuous emission monitoring system of Unit 3. Note that the Relative Accuracy Test Audit (RATA) for NO_x is conducted annually at power output rating between 24 and 26 megawatts.

Comment 3. Provide a synopsis of the pollutant compliance tests conducted on Unit 3 for the last ten years and include the heat input during each test performed.

Response: Unit 3 is required to perform compliance testing for PM and VE emissions if fuel oil-firing hours are 400 or more per year. During the last 10 years, the only compliance test conducted on Unit 3 was for PM and VE on October 2, 2001.

Comment 4. Provide a detailed description of the actual work that will be performed on Unit 3. When is the work planned to be conducted?

Response: The following work has been planned for Unit 3:

- Remove all remaining insulation and lagging from the outside of boiler water walls and steam drum.
- Remove the water wall tubes on the sides of the boiler.
- Flush bottom headers with de-mineralized water.
- Remove the water wall roof panels from the steam drum to just below the ceiling in the wind box. This includes removing refractory and steel from around the super heater tube penetrations. Remove steam drum internals to allow access for rolling water wall tubes into the drum and replacing the drum internals when tube installation is completed.
- Remove the rear water wall tubes from the steam drum down to the mud drum, including the refractory above the mud drum so the new tubes can be rolled in the mud drum.
- Fabricate water wall roof panels. The panels will be fabricated using 3¼-inch outside diameter (OD) x .180 minimum wall (MW) thickness, SA178A material. The panels will be built on 4-inch centers with ¾-inch fin membrane from steam drum to the cut line just below the wind box ceiling where the old tubes were removed.
- Replace the refractory around the super heater tube penetrations on the roof panels and cover with steel plate.
- Fabricate and install left-hand and right-hand side water wall panels with upper headers attached. These panels will be fabricated using 3¼-inch OD x .180 MW thickness, SA178A material. The panels will be built on 4-inch centers with ¾-inch fin membrane. The upper headers will be fabricated from 8 5/8-inch OD x .812 wall with SA106 Gr. B pipe.
- Fabricate rear wall panels from the steam drum to the mud drum. The panels will be fabricated using 3¼-inch OD x .180 MW, SA178A material. The panel will be built on 4-inch centers with a ¾-inch fin membrane. The tubes will be rolled into the drums.

- Install the refractory around the rear water wall tubes between the mud drum.
- Fabricate 22 upper header feeder tubes. The tubes will be supplied from the upper header to the steam drum. These tubes will be fabricated using 4-inch OD x .220 MW, SA210A1 material.
- Replace missing baffle brick supports between tubes 6 and 7 of the superheat section EL. 38-feet.
- Repair cracked firebrick found on the furnace floor.
- Replace damaged baffle bricks in the superheat section at EL. 36-feet.
- Replace the refractory along the rear wall of the furnace where the super heater come up through the furnace.
- Re-insulate the boiler using the existing lagging.
- Cover the top of the boiler with expanded metal so all insulation will remain off the top of the water wall tubes.

Comment 5. Will the proposed re-tubing allow Unit 3 to regain lost capacity?

Response: Unit 3 experienced tube failure in May 2008 and is currently inoperable. The boiler is in immediate need of having its water walls replaced so that it can be safely operated again. Note that the unit is required by the CLWU to maintain system security during peak load conditions due to transmission and distribution infrastructure constraints.

Comment 6. Provide any current operational data showing operation at permitted capacity.

Response: Current operational data for the last 5 years prior to the tube failure are presented below:

	Gross Generation (kWh)	Natural Gas Used (10 ³ ft ³)	Hours on Natural Gas	Fuel Oil Used (10 ³ gal)	Hours on Fuel Oil
May 03 – May 04	4,321,278	32,009	226	87.5	48
May 04 – May 05	707,519	4,924	61	0	0
May 05 – May 06	6,454,716	89,848	386	88.3	52
May 06 – May 07	5,926,836	99,336	262	0	0
May 07 – May 08	5,996,675	98,741	142	0	0

Thank you for consideration of this information. If you have any questions, please do not hesitate to call me at (352) 336-5600.

Sincerely,

GOLDER ASSOCIATES INC.



Kennard K. Kosky, P.E.
Principal Engineer



Salahuddin Mohammad
Senior Project Engineer

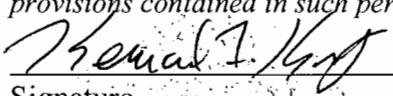
SKM/tlc

Enclosures

cc: M. Ridge, CLWU

R031809-554.docx

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
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. Fax: (352) 336-6603
4. Professional Engineer E-mail Address:
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(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</i> <i>(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.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , 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 plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , 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.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , 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.</i> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  Signature _____ </div> <div style="width: 45%; text-align: right;"> 3/19/09 Date _____ </div> </div>

* Attach any exceptions to certification statement.

**Board of Professional Engineers Certificate of Authorization #00001670.

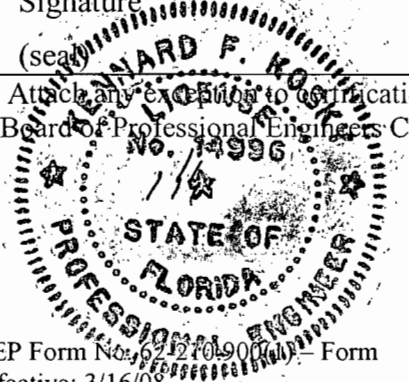


TABLE 1
ESTIMATED ACTUAL ANNUAL EMISSIONS FOR UNIT 3 DUE TO NATURAL GAS-FIRING

Pollutant	Natural Gas Consumption (10 ⁶ scf/yr) ^a					Emissions Factor ^b (lb/10 ⁶ scf)	Annual Emissions (TPY)				
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008		2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
NO _x	32.0	4.9	89.8	99.3	98.7	280	4.5	0.7	12.6	13.9	13.8
CO	32.0	4.9	89.8	99.3	98.7	84	1.3	0.2	3.8	4.2	4.1
SO ₂	32.0	4.9	89.8	99.3	98.7	0.6	0.01	0.001	0.027	0.030	0.030
VOC	32.0	4.9	89.8	99.3	98.7	5.5	0.09	0.01	0.25	0.27	0.27
PM ^c	32.0	4.9	89.8	99.3	98.7	7.6	0.12	0.02	0.34	0.38	0.38
PM ₁₀ ^c	32.0	4.9	89.8	99.3	98.7	7.6	0.12	0.02	0.34	0.38	0.38

^a Provided by City of Lake Worth Utilities. Time range is from May to April.

^b Tables 1.4-1 and 1.4-2, Section 1.4, AP-42.

^c Total particulate matter (filterable + condensable).

**TABLE 2
ESTIMATED ACTUAL ANNUAL EMISSIONS FOR UNIT 3 DUE TO FUEL OIL-FIRING**

Pollutant	Fuel Oil Consumption (10 ³ gal/yr) ^a					Emissions Factor ^b (lb/10 ³ gal)	Annual Emissions (TPY)				
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008		2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
NO _x	87.5	0.0	88.3	0.0	0.0	47	2.1	0.0	2.1	0.0	0.0
CO	87.5	0.0	88.3	0.0	0.0	5	0.2	0.0	0.2	0.0	0.0
SO ₂	87.5	0.0	88.3	0.0	0.0	157 *S	15.46	0.00	15.60	0.00	0.00
VOC	87.5	0.0	88.3	0.0	0.0	0.76	0.03	0.00	0.03	0.00	0.00
PM ^c	87.5	0.0	88.3	0.0	0.0	1.5+3.22+9.19 *S	1.11	0.00	1.12	0.00	0.00
PM ₁₀ ^c	87.5	0.0	88.3	0.0	0.0	1.5+3.22+9.19 *S	1.11	0.00	1.12	0.00	0.00

^a Provided by City of Lake Worth Utilities. Time range is from May to April.

^b Tables 1.3-1, 1.3-2, and 1.3-3, Section 1.3, AP-42. Fuel sulfur content (S) is limited to 2.25%.

^c Total particulate matter (filterable + condensable).

TABLE 3
UNIT 3 ANNUAL AVERAGE EMISSIONS (NATURAL GAS- AND FUEL OIL-FIRING)
FOR EACH CONSECUTIVE TWO-YEAR PERIOD, 2002-2006

Pollutant	Total Annual Emissions (May to April) ^a					Two-Year Average Annual Emissions (May to April)			
	2003-2004 (TPY)	2004-2005 (TPY)	2005-2006 (TPY)	2006-2007 (TPY)	2007-2008 (TPY)	2003-2005 (TPY)	2004-2006 (TPY)	2005-2007 (TPY)	2006-2008 (TPY)
NO _x	6.5	0.7	14.7	13.9	13.8	3.6	7.7	14.3	13.9
CO	1.6	0.2	4.0	4.2	4.1	0.9	2.1	4.1	4.2
SO ₂	15.5	0.0	15.6	0.0	0.0	7.7	7.8	7.8	0.0
VOC	0.1	0.0	0.3	0.3	0.3	0.1	0.1	0.3	0.3
PM	1.2	0.0	1.5	0.4	0.4	0.6	0.7	0.9	0.4
PM ₁₀	1.2	0.0	1.5	0.4	0.4	0.6	0.7	0.9	0.4

^a Sum of natural gas-firing and fuel oil-firing emissions. See Table 1 for natural gas-firing emissions and Table 2 for fuel oil-firing emissions.

TABLE 4
FUTURE PROJECTED ACTUAL EMISSIONS FOR UNIT 3 DUE TO NATURAL GAS-FIRING

Pollutant	Potential Hourly Heat Input ^a (MMBtu/hr)	Annual Operation ^b (hrs/yr)	Natural Gas Heat Content ^c (MMBtu/10⁶ scf)	Hourly Natural Gas Consumption (10⁶ scf/hr)	Emissions Factor ^d (lb/10⁶ scf)	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
NO _x	325.1	386	1,040	0.31	280	87.5	16.9
CO	325.1	386	1,040	0.31	84	26.3	5.1
SO ₂	325.1	386	1,040	0.31	0.6	0.2	0.0
VOC	325.1	386	1,040	0.31	5.5	1.7	0.3
PM ^e	325.1	386	1,040	0.31	7.6	2.4	0.5
PM ₁₀ ^e	325.1	386	1,040	0.31	7.6	2.4	0.5

^a Maximum hourly heat input rate, Permit No. 0990045-005-AV.

^b Annual operating hours based on maximum natural gas-firing operating hours during the period May 2003 to April 2008.

^c Provided by City of Lake Worth Utilities.

^d Tables 1.4-1 and 1.4-2, Section 1.4, AP-42.

^e Total particulate matter (filterable + condensable).

**TABLE 5
FUTURE PROJECTED ACTUAL EMISSIONS FOR UNIT 3 DUE TO FUEL OIL-FIRING**

Pollutant	Potential Hourly Heat Input ^a (MMBtu/hr)	Annual Operation ^b (hrs/yr)	Fuel Oil Heat Content ^c (Btu/gal)	Hourly Fuel Oil Consumption (10³ gal/hr)	Emissions Factor ^d (lb/10³ gal)	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
NO _x	325.1	52	145,000	2.24	47	105.4	2.7
CO	325.1	52	145,000	2.24	5	11.2	0.3
SO ₂	325.1	52	145,000	2.24	157 *S	792.0	20.6
VOC	325.1	52	145,000	2.24	0.8	1.7	0.04
PM ^e	325.1	52	145,000	2.24	1.5+3.22+9.19 *S	56.9	1.5
PM ₁₀ ^e	325.1	52	145,000	2.24	1.5+3.22+9.19 *S	56.9	1.5

^a Maximum hourly heat input rate, Permit No. 0990045-005-AV.

^b Annual operating hours based on maximum fuel oil-firing operating hours during the period May 2003 to April 2008.

^c Provided by City of Lake Worth Utilities.

^d Tables 1.3-1, 1.3-2 and 1.3-3, Section 1.3, AP-42. Fuel sulfur content (S) is limited to 2.25%.

^e Total particulate matter (filterable + condensable).

TABLE 6
PSD APPLICABILITY - UNIT 3 RE-TUBING PROJECT
(FUTURE PROJECTED ACTUAL - 2-YEAR AVERAGE BASELINE ACTUAL)

Pollutant	Maximum 2-Year Average Baseline Actual Emissions^a (TPY)	Projected Actual Emissions^b (TPY)	Increase/Decrease in Emissions (TPY)	PSD Significant Emission Rate (TPY)
NO _x	14.3	19.6	5.4	40
CO	4.2	5.4	1.2	100
SO ₂	7.8	20.6	12.8	40
VOC	0.3	0.4	0.1	40
PM	0.9	1.9	1.0	25
PM ₁₀	0.9	1.9	1.0	15

^a Maximum 2-year average emission rate from Table 3.

^b Sum of projected actual natural gas-firing emissions and projected actual oil-firing emissions, see Tables 4 and 5.

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BUREAU OF AIR REGULATION

**AIR CONSTRUCTION PERMIT APPLICATION
FOR REPLACEMENT OF
WATER-WALL TUBES OF
FOSSIL FUEL STEAM GENERATING
UNIT NO. 3
*PALM BEACH COUNTY, FLORIDA***

Prepared For:

**City of Lake Worth Utilities
117 College Street
Lake Worth, Florida 33461**

Prepared By:

**Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500**

January 2009

0938-7503

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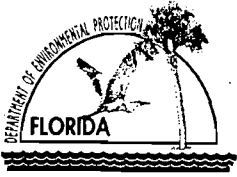
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1 Copy – Golder Associates Inc.

APPLICATION FOR AIR PERMIT

LONG FORM



Department of Environmental Protection

Division of Air Resource Management APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: City of Lake Worth Utilities	
2. Site Name: Tom G. Smith Power Plant	
3. Facility Identification Number: 0990045	
4. Facility Location... Street Address or Other Locator: 117 College Street City: Lake Worth County: Palm Beach Zip Code: 33461	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: Mike Ridge	
2. Application Contact Mailing Address... Organization/Firm: City of Lake Worth Street Address: 1900 2nd Avenue North City: Lake Worth State: FL Zip Code: 33461	
3. Application Contact Telephone Numbers... Telephone: (561) 533-7379 ext. Fax: (561) 540-5304	
4. Application Contact E-mail Address: mridge@lakeworth.org	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 1/22/09	3. PSD Number (if applicable):
2. Project Number(s): 0990045-007-A	4. Siting Number (if applicable):

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:


- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is for the purpose of getting authorization from FDEP to replace the damaged water-wall tubes of the fossil fuel steam generating unit No. 3 (EU ID 009).

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name : David Mulvay
2. Owner/Authorized Representative Mailing Address... Organization/Firm: City of Lake Worth Utilities Street Address: 1900 2nd Avenue North City: Lake Worth State: FL Zip Code: 33461
3. Owner/Authorized Representative Telephone Numbers... Telephone: (561) 533-7379 ext. Fax: (561) 533-7387
4. Owner/Authorized Representative E-mail Address: dmulvay@lakeworth.org
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  Signature <u>1-12-09</u> Date

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”

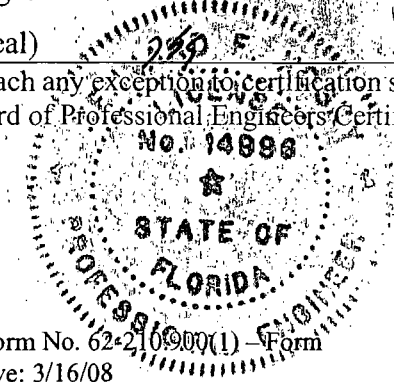
1. Application Responsible Official Name:	
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.	
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:	
4. Application Responsible Official Telephone Numbers... Telephone: ext. Fax:	
5. Application Responsible Official E-mail Address:	
6. Application Responsible Official Certification: I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. 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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.	
Signature	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
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. Fax: (352) 336-6603
4. Professional Engineer E-mail Address:
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <p>(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</p> <p>(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.</p> <p>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , 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 plan and schedule is submitted with this application.</p> <p>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , 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.</p> <p>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , 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.</p> <p><i>Kennard F. Kosky</i> _____ Signature</p> <p><u>1/21/09</u> _____ Date</p> <p>(seal)</p>

* Attach any exception to certification statement.

**Board of Professional Engineers Certificate of Authorization #00001670.



PART B

**APPLICATION FOR MINOR SOURCE AIR CONSTRUCTION PERMIT
FOR THE REPLACEMENT OF WATER-WALL TUBES OF FOSSIL FUEL STEAM
GENERATING UNIT 3 (EU ID 009)**

City of Lake Worth Utilities (CLWU) is seeking authorization from the Florida Department of Environmental Protection (FDEP) to replace the water-wall tubes of the fossil fuel steam generating unit No. 3 (EU ID 009) at the Tom G. Smith power plant, which experienced external tube failure in May of 2008. Unit 3 is required by the City of Lake Worth to maintain system security during peak load conditions due to transmission and distribution infrastructure constraints. The facility is currently operating under Title V operating permit No. 0990045-005-AV and operates five diesel engine generators, one fossil fuel steam generator, one simple cycle gas turbine, one combined cycle gas turbine, and other ancillary equipment. The replacement of water-wall tubes will not change any of the FDEP authorized conditions for Unit 3.

The fossil fuel steam generator Unit 3 has a maximum design heat input rate of 325.1 million British thermal units per hour (MMBtu/hr) and can fire both natural gas and No. 6 fuel oil. The unit is rated at a nominal 26.5 megawatts (MW) of electricity generation. There is no hourly operation limitation on the unit.

Particulate matter (PM) emissions from the unit are limited to 0.1 pound per million Btu heat input (lb/MMBtu) during normal operation and 0.3 lb/MMBtu during soot blowing and load change. Soot blowing and load change is limited to a maximum of 3 hours in any 24-hour period. Nitrogen oxides (NO_x) emissions from the unit are limited to 0.5 lb/MMBtu while firing natural gas or No. 6 fuel oil. Maximum sulfur content of the No. 6 fuel oil is limited to 2.25 percent by weight.

Steam boilers contain tubes in which the water is evaporated to steam, also called steam generating tubes. These tubes also form the walls of the boiler and hence are called water-walls or water-wall panels. Steam generating Unit 3 experienced an external tube failure in May 2008 and needs replacement of the damaged tubes in order to operate. The damaged tubes will be replaced by like-kind tubes. The replacement has no effect on emissions, steam production, or electricity generation by the unit.

Based on guidance from FDEP, CLWU has prepared a construction permit application for the authorization of the replacement. Golder Associates Inc. (Golder) was contracted to review the air permit application and submit it to FDEP on behalf of CLWU. The air permit application package

consists of the first six pages of FDEP Form 62-210.900(1), a technical description of the project, and rule applicability for the project. Part II (Facility Information) and III (Emissions Unit Information) of the form have been excluded because there is no change to any of the existing facility or steam generating Unit 3 information.

Rule Applicability

Under Federal and State of Florida Prevention of Significant Deterioration (PSD) review requirements, all major new or modified sources of air pollutants regulated under the Clean Air Act (CAA) must be reviewed and a pre-construction permit issued. The U.S. Environmental Protection Agency (EPA) has approved Florida's State Implementation Plan (SIP), which contains PSD regulations. Therefore, PSD approval authority has been granted to FDEP.

A "major facility" is defined as any 1 of 28 named source categories that have the potential to emit 100 tons per year (TPY) or more, or any other stationary facility that has the potential to emit 250 TPY or more, of any pollutant regulated under the CAA. "Potential to emit" means the capability, at maximum design capacity, to emit a pollutant after the application of control equipment. Once a new source is determined to be a "major facility" for a particular pollutant, any pollutant emitted in amounts greater than the PSD significant emission rates is subject to PSD review. For an existing major source for which a modification is proposed, the modification is subject to PSD review if the net increase in emissions due to the modification is greater than the PSD significant emission rates.

PSD review is used to determine whether significant air quality deterioration will result from the new or modified facility. Federal PSD requirements are contained in Title 40, Part 52.21 of the Code of Federal Regulations (40 CFR 52.21), *Prevention of Significant Deterioration of Air Quality*. The State of Florida has adopted the federal PSD regulations by reference [Rule 62-212.400, Florida Administrative Code (F.A.C.)]. Major facilities and major modifications are required to undergo the following analysis related to PSD for each pollutant emitted in significant amounts:

- Control technology review;
- Source impact analysis;
- Air quality analysis (monitoring);
- Source information; and
- Additional impact analyses.

CLWU's Tom G. Smith power plant facility is a major facility under FDEP Rules. An analysis of PSD would be required if replacement or repair of the Unit 3 boiler tubes is considered a "modification" under the FDEP definitions in Rule 62-210.200. Under these rules a modification is defined as:

"Modification" – Any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.

As part of this definition "a physical change or change in the method of operation shall not include: 1. Routine maintenance, repair, or replacement" of component parts of an emissions unit.

The physical replacement of boiler tubes, while a physical change, is a recognized maintenance issue for boilers. Indeed, Combustion Engineering "Combustion-Fossil Power Systems" and Babcock and Wilcox "Steam Its Generation and Use" recognize boiler tube leaks as a standard maintenance issue for boilers. In the case of Unit 3, the replacement of tubes is necessary for the unit to become operational. The replacement will be "like-kind" so as to make Unit 3 operational in the same manner as before the failure. No other physical changes will be made.

For steam generating Unit 3, there is no change in the method of operation or the steam generating capacity of the boiler as a result of the replacement of water-wall boiler tubes. Consequently, there will be no change in emissions. The boiler is currently inoperable due to the damaged tubes and the project involves the "like-kind" replacement of the damaged tubes. Based on the fact that there is no net emissions increase, this project is not subject to PSD review.

Golder Associates Inc.

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



TRANSMITTAL LETTER

To: Jeff Koerner

Date: January 21, 2009

Project No.: 09387503-0100/SKM-tlc

FDEP

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BUREAU OF AIR REGULATION

Per: Sal Mohammad

Quantity	Item	Description
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cc. David Mulvay (1 copy)

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JAN 22 2009

BUREAU OF AIR REGULATION

**AIR CONSTRUCTION PERMIT APPLICATION
FOR REPLACEMENT OF
WATER-WALL TUBES OF
FOSSIL FUEL STEAM GENERATING
UNIT NO. 3
*PALM BEACH COUNTY, FLORIDA***

Prepared For:

**City of Lake Worth Utilities
117 College Street
Lake Worth, Florida 33461**

Prepared By:

**Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500**

January 2009

0938-7503

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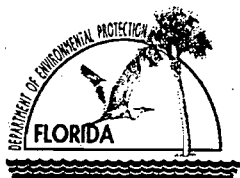
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APPLICATION FOR AIR PERMIT

LONG FORM



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: City of Lake Worth Utilities	
2. Site Name: Tom G. Smith Power Plant	
3. Facility Identification Number: 0990045	
4. Facility Location... Street Address or Other Locator: 117 College Street City: Lake Worth County: Palm Beach Zip Code: 33461	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: Mike Ridge	
2. Application Contact Mailing Address... Organization/Firm: City of Lake Worth Street Address: 1900 2nd Avenue North City: Lake Worth State: FL Zip Code: 33461	
3. Application Contact Telephone Numbers... Telephone: (561) 533-7379 ext. Fax: (561) 540-5304	
4. Application Contact E-mail Address: mr ridge@lakeworth.org	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 1/22/09	3. PSD Number (if applicable):
2. Project Number(s): 0990045-001-AE	4. Siting Number (if applicable):

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:


- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is for the purpose of getting authorization from FDEP to replace the damaged water-wall tubes of the fossil fuel steam generating unit No. 3 (EU ID 009).

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

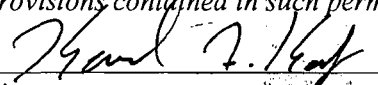
1. Owner/Authorized Representative Name : David Mulvay
2. Owner/Authorized Representative Mailing Address... Organization/Firm: City of Lake Worth Utilities Street Address: 1900 2nd Avenue North City: Lake Worth State: FL Zip Code: 33461
3. Owner/Authorized Representative Telephone Numbers... Telephone: (561) 533-7379 ext. Fax: (561) 533-7387
4. Owner/Authorized Representative E-mail Address: dmulvay@lakeworth.org
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  Signature <u>1-12-09</u> Date

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”

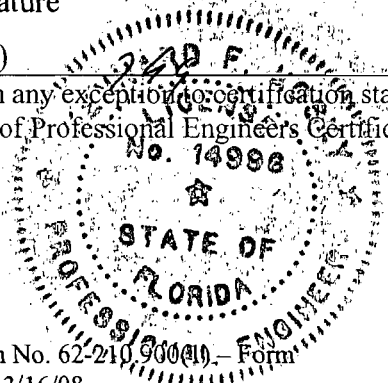
1. Application Responsible Official Name:			
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):			
<input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.			
<input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively.			
<input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.			
<input type="checkbox"/> The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.			
3. Application Responsible Official Mailing Address...			
Organization/Firm:			
Street Address:			
City:		State:	Zip Code:
4. Application Responsible Official Telephone Numbers...			
Telephone:		ext.	Fax:
5. Application Responsible Official E-mail Address:			
6. Application Responsible Official Certification:			
<p>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. 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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</p>			
_____ Signature		_____ 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
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. Fax: (352) 336-6603
4. Professional Engineer E-mail Address:
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(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</i> <i>(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.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , 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 plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , 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.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , 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.</i> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  _____ Signature (seal) </div> <div style="text-align: center;"> _____ 1/21/09 Date </div> </div>

* Attach any exception to certification statement.

**Board of Professional Engineers Certificate of Authorization #00001670.



PART B

**APPLICATION FOR MINOR SOURCE AIR CONSTRUCTION PERMIT
FOR THE REPLACEMENT OF WATER-WALL TUBES OF FOSSIL FUEL STEAM
GENERATING UNIT 3 (EU ID 009)**

City of Lake Worth Utilities (CLWU) is seeking authorization from the Florida Department of Environmental Protection (FDEP) to replace the water-wall tubes of the fossil fuel steam generating unit No. 3 (EU ID 009) at the Tom G. Smith power plant, which experienced external tube failure in May of 2008. Unit 3 is required by the City of Lake Worth to maintain system security during peak load conditions due to transmission and distribution infrastructure constraints. The facility is currently operating under Title V operating permit No. 0990045-005-AV and operates five diesel engine generators, one fossil fuel steam generator, one simple cycle gas turbine, one combined cycle gas turbine, and other ancillary equipment. The replacement of water-wall tubes will not change any of the FDEP authorized conditions for Unit 3.

The fossil fuel steam generator Unit 3 has a maximum design heat input rate of 325.1 million British thermal units per hour (MMBtu/hr) and can fire both natural gas and No. 6 fuel oil. The unit is rated at a nominal 26.5 megawatts (MW) of electricity generation. There is no hourly operation limitation on the unit.

Particulate matter (PM) emissions from the unit are limited to 0.1 pound per million Btu heat input (lb/MMBtu) during normal operation and 0.3 lb/MMBtu during soot blowing and load change. Soot blowing and load change is limited to a maximum of 3 hours in any 24-hour period. Nitrogen oxides (NO_x) emissions from the unit are limited to 0.5 lb/MMBtu while firing natural gas or No. 6 fuel oil. Maximum sulfur content of the No. 6 fuel oil is limited to 2.25 percent by weight.

Steam boilers contain tubes in which the water is evaporated to steam, also called steam generating tubes. These tubes also form the walls of the boiler and hence are called water-walls or water-wall panels. Steam generating Unit 3 experienced an external tube failure in May 2008 and needs replacement of the damaged tubes in order to operate. The damaged tubes will be replaced by like-kind tubes. The replacement has no effect on emissions, steam production, or electricity generation by the unit.

Based on guidance from FDEP, CLWU has prepared a construction permit application for the authorization of the replacement. Golder Associates Inc. (Golder) was contracted to review the air permit application and submit it to FDEP on behalf of CLWU. The air permit application package

consists of the first six pages of FDEP Form 62-210.900(1), a technical description of the project, and rule applicability for the project. Part II (Facility Information) and III (Emissions Unit Information) of the form have been excluded because there is no change to any of the existing facility or steam generating Unit 3 information.

Rule Applicability

Under Federal and State of Florida Prevention of Significant Deterioration (PSD) review requirements, all major new or modified sources of air pollutants regulated under the Clean Air Act (CAA) must be reviewed and a pre-construction permit issued. The U.S. Environmental Protection Agency (EPA) has approved Florida's State Implementation Plan (SIP), which contains PSD regulations. Therefore, PSD approval authority has been granted to FDEP.

A "major facility" is defined as any 1 of 28 named source categories that have the potential to emit 100 tons per year (TPY) or more, or any other stationary facility that has the potential to emit 250 TPY or more, of any pollutant regulated under the CAA. "Potential to emit" means the capability, at maximum design capacity, to emit a pollutant after the application of control equipment. Once a new source is determined to be a "major facility" for a particular pollutant, any pollutant emitted in amounts greater than the PSD significant emission rates is subject to PSD review. For an existing major source for which a modification is proposed, the modification is subject to PSD review if the net increase in emissions due to the modification is greater than the PSD significant emission rates.

PSD review is used to determine whether significant air quality deterioration will result from the new or modified facility. Federal PSD requirements are contained in Title 40, Part 52.21 of the Code of Federal Regulations (40 CFR 52.21), *Prevention of Significant Deterioration of Air Quality*. The State of Florida has adopted the federal PSD regulations by reference [Rule 62-212.400, Florida Administrative Code (F.A.C.)]. Major facilities and major modifications are required to undergo the following analysis related to PSD for each pollutant emitted in significant amounts:

- Control technology review;
- Source impact analysis;
- Air quality analysis (monitoring);
- Source information; and
- Additional impact analyses.

CLWU's Tom G. Smith power plant facility is a major facility under FDEP Rules. An analysis of PSD would be required if replacement or repair of the Unit 3 boiler tubes is considered a "modification" under the FDEP definitions in Rule 62-210.200. Under these rules a modification is defined as:

"Modification" – Any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.

As part of this definition "a physical change or change in the method of operation shall not include: 1. Routine maintenance, repair, or replacement" of component parts of an emissions unit.

The physical replacement of boiler tubes, while a physical change, is a recognized maintenance issue for boilers. Indeed, Combustion Engineering "Combustion-Fossil Power Systems" and Babcock and Wilcox "Steam Its Generation and Use" recognize boiler tube leaks as a standard maintenance issue for boilers. In the case of Unit 3, the replacement of tubes is necessary for the unit to become operational. The replacement will be "like-kind" so as to make Unit 3 operational in the same manner as before the failure. No other physical changes will be made.

For steam generating Unit 3, there is no change in the method of operation or the steam generating capacity of the boiler as a result of the replacement of water-wall boiler tubes. Consequently, there will be no change in emissions. The boiler is currently inoperable due to the damaged tubes and the project involves the "like-kind" replacement of the damaged tubes. Based on the fact that there is no net emissions increase, this project is not subject to PSD review.

RECEIVED

JAN 22 2009

BUREAU OF AIR REGULATION

**AIR CONSTRUCTION PERMIT APPLICATION
FOR REPLACEMENT OF
WATER-WALL TUBES OF
FOSSIL FUEL STEAM GENERATING
UNIT NO. 3
*PALM BEACH COUNTY, FLORIDA***

Prepared For:

**City of Lake Worth Utilities
117 College Street
Lake Worth, Florida 33461**

Prepared By:

**Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500**

January 2009

0938-7503

DISTRIBUTION:

4 Copies – FDEP

1 Copy – City of Lake Worth Utilities

1 Copy – Golder Associates Inc.

APPLICATION FOR AIR PERMIT

LONG FORM



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: City of Lake Worth Utilities	
2. Site Name: Tom G. Smith Power Plant	
3. Facility Identification Number: 0990045	
4. Facility Location... Street Address or Other Locator: 117 College Street City: Lake Worth County: Palm Beach Zip Code: 33461	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: Mike Ridge	
2. Application Contact Mailing Address... Organization/Firm: City of Lake Worth Street Address: 1900 2nd Avenue North City: Lake Worth State: FL Zip Code: 33461	
3. Application Contact Telephone Numbers... Telephone: (561) 533-7379 ext. Fax: (561) 540-5304	
4. Application Contact E-mail Address: mridge@lakeworth.org	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 1/22/09	3. PSD Number (if applicable):
2. Project Number(s): 0990045-007-A	4. Siting Number (if applicable):

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:


- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is for the purpose of getting authorization from FDEP to replace the damaged water-wall tubes of the fossil fuel steam generating unit No. 3 (EU ID 009).

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name : David Mulvay
2. Owner/Authorized Representative Mailing Address... Organization/Firm: City of Lake Worth Utilities Street Address: 1900 2nd Avenue North City: Lake Worth State: FL Zip Code: 33461
3. Owner/Authorized Representative Telephone Numbers... Telephone: (561) 533-7379 ext. Fax: (561) 533-7387
4. Owner/Authorized Representative E-mail Address: dmulvay@lakeworth.org
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  Signature <u>1-12-09</u> Date

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

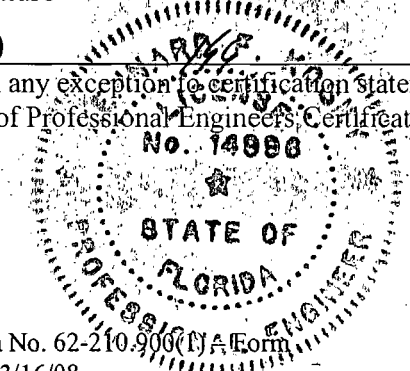
1. Application Responsible Official Name:
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
4. Application Responsible Official Telephone Numbers... Telephone: ext. Fax:
5. Application Responsible Official E-mail Address:
6. Application Responsible Official Certification: I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. 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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application. Signature _____ 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
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. Fax: (352) 336-6603
4. Professional Engineer E-mail Address:
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <p>(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</p> <p>(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.</p> <p>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , 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 plan and schedule is submitted with this application.</p> <p>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , 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.</p> <p>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , 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.</p> <p><i>Kennard F. Kosky</i> _____ Signature Date <u>1/21/09</u></p> <p>(seal)</p>

* Attach any exception to certification statement.

**Board of Professional Engineers, Certificate of Authorization #00001670.



PART B

**APPLICATION FOR MINOR SOURCE AIR CONSTRUCTION PERMIT
FOR THE REPLACEMENT OF WATER-WALL TUBES OF FOSSIL FUEL STEAM
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