Harvey, Mary

9/21/07

From: Harvey, Mary

Sent: Friday, September 21, 2007 3:59 PM

To: 'Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Bradburn, Rick

Cc: Branum, Corrie; Adams, Patty; Gibson, Victoria

Subject: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

Attachments: 0050014-012-AC - FINAL Transmittal Memo.PDF; 0050014-012-AC Appendix - AC -Minor-FINAL.PDF; 0050014-012-AC Final Determination.PDF; 0050014-012-AC Final Permit.PDF; 0050014-012-AC Notice of Final Permit.PDF; Signed Documents - Facility 0050014-012-FINAL.pdf

Tracking:

Recipient	Delivery	Read
'Penny Manuel, Gulf Power Company'		
'Mr. Glenn Waters, Gulf Power Company'		
'Mr. Tom Davis, ECT, Inc.'		
'Ms. Kathleen Forney, EPA Region 4'		
Bradburn, Rick	Delivered: 9/21/2007 3:59 PM	Read: 9/21/2007 4:00 PM
Branum, Corrie	Delivered: 9/21/2007 3:59 PM	Read: 9/21/2007 4:05 PM
Adams, Patty		Read: 9/21/2007 4:03 PM
Gibson, Victoria		Read: 9/21/2007 4:00 PM

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 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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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,

DEP, Bureau of Air Regulation

Harvey, Mary

From: Waters, G. Dwain [GDWATERS@southernco.com]
To: undisclosed-recipients
Sent: Friday, September 21, 2007 3:59 PM
Subject: Read: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

Your message

To: GDWATERS@southernco.com
Subject:

was read on 9/21/2007 3:59 PM.

Harvey, Mary

From: Bradburn, Rick
To: Harvey, Mary
Sent: Friday, September 21, 2007 4:00 PM
Subject: Read: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

Your message

To:	'Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Bradburn, Rick
Cc:	Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject:	Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL
Sent:	9/21/2007 3:59 PM

was read on 9/21/2007 4:00 PM.

Harvey, Mary

From: Gibson, Victoria
To: Harvey, Mary
Sent: Friday, September 21, 2007 4:00 PM
Subject: Read: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

Your message

To:	'Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Bradburn, Rick
Cc:	Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject:	Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL
Sent:	9/21/2007 3:59 PM

was read on 9/21/2007 4:00 PM.

Harvey, Mary

From: Waters, G. Dwain [GDWATERS@southernco.com]
Sent: Friday, September 21, 2007 4:00 PM
To: Harvey, Mary; Manuel, Penny Morris; Mr. Tom Davis, ECT, Inc.; Ms. Kathleen Forney, EPA Region 4; Bradburn, Rick
Cc: Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject: RE: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

Gulf Power has received the above reference permit. Thanks for your quick response. Dwain Waters

G. Dwain Waters,Q.E.P.
Special Projects and Environmental Assets Coordinator
Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0328
Phone: (850) 444-6527
Cell: (850) 336-6527
Fax: (850) 444-6217
gdwaters@southernco.com

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Friday, September 21, 2007 2:59 PM
To: Manuel, Penny Morris; Waters, G. Dwain; Mr. Tom Davis, ECT, Inc.; Ms. Kathleen Forney, EPA Region 4; Bradburn, Rick
Cc: Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

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The Bureau of Air Regulation is issuing electronic documents for permits, notices and

Harvey, Mary

From: Adams, Patty
To: Harvey, Mary
Sent: Friday, September 21, 2007 4:03 PM
Subject: Read: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

Your message

To:	'Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Bradburn, Rick
Cc:	Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject:	Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL
Sent:	9/21/2007 3:59 PM

was read on 9/21/2007 4:03 PM.

Harvey, Mary

From: Branum, Corrie
To: Harvey, Mary
Sent: Friday, September 21, 2007 4:06 PM
Subject: Read: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

Your message

To:	'Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney, EPA Region 4'; Bradburn, Rick
Cc:	Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject:	Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL
Sent:	9/21/2007 3:59 PM

was read on 9/21/2007 4:05 PM.

Harvey, Mary

From: Tom Davis [tdavis@ectinc.com]
Sent: Friday, September 21, 2007 4:30 PM
To: Harvey, Mary
Subject: RE: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Friday, September 21, 2007 3:59 PM
To: Penny Manuel, Gulf Power Company; Mr. Glenn Waters, Gulf Power Company; Mr. Tom Davis, ECT, Inc.; Ms. Kathleen Forney, EPA Region 4; Bradburn, Rick
Cc: Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject: Gulf Power Company - Lansing Smith Plant - Facility #0050014-012-AC-FINAL

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Thank you,

DEP, Bureau of Air Regulation

Florida Department of Environmental Protection

Memorandum

TO: Joseph Kahn, Division of Air Resource Management

THRU: Trina Vielhauer, Bureau of Air Regulation
Jeff Koerner, Air Permitting North Section JK

FROM: Corrie Branum, Air Permitting North Section CB

DATE: September 20, 2007

SUBJECT: Project No. 0050014-012-AC
Gulf Power Company
Lansing Smith Plant
SNCR/HERT and MOBOTEC Projects

The Final Permit for this project is attached for your approval and signature, which authorizes Gulf Power Company to perform two demonstration projects to evaluate control technologies intended to reduce nitrogen oxides and mercury emissions. The existing power plant is located in Bay County at 4300 County Road 2300 in Lynn Haven, Florida. The project results in a minor source air construction permit and is not subject to PSD preconstruction review.

I recommend your approval of the attached Final Permit for this project.

Attachments

PERMITTEE

Gulf Power Company
One Energy Place
Pensacola, FL 32520-0328

PERMITTING AUTHORITY

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

PROJECT

Air Permit No. 0050014-012-AC
Lansing Smith Plant

Gulf Power Company operates an existing electrical generating power plant (SIC No. 4911) located in Bay County at 4300 County Road 2300 in Lynn Haven, Florida. The UTM coordinates are Zone 16, 625.03 km east and 3349.08 km north. This air construction permit authorizes Gulf Power Company to perform two demonstration projects to evaluate control technologies for Units 1 and 2: SNCR/HERT for nitrogen oxides (NOx) and MOBOTEC with MinPlus for mercury.

NOTICE AND PUBLICATION

The Department distributed an Intent to Issue Permit package on August 15, 2007. The applicant published the Public Notice of Intent to Issue in The News Herald on September 3, 2007. The Department received the proof of publication on September 17, 2007.

COMMENTS

No comments were received from the Department's NWD Office, EPA Region 4 or the public.

Applicant

On September 11, 2007, the Department received comments from the applicant. The following summarizes the comments and the Department's response.

1. *Comment*: In Section 3, Subsection A, Condition No. 5, the applicant requests that the 14 day test window be extended to 30 days. *Response*: The Department agrees and incorporates this change.
2. *Comment*: In Section 3, Subsection B, Condition No. 4, the applicant requests that the test method description be revised, to allow methods other than a sorbent trap to determine mercury emissions. *Response*: The Department agrees and revised the condition to allow other equivalent methods.
3. *Comment*: In Section 3, Subsection B, Condition No. 6, the applicant requests that the report deadline date be extended to 60 days instead of 45 days after completing the MOBOTEC with MinPlus tests. *Response*: The Department agrees and revised accordingly.

CONCLUSION

The final action of the Department is to issue the permit with the corrections as described above.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Gulf Power Company
One Energy Place
Pensacola, FL, 32520-0328

Authorized Representative:
Penny Manuel, Vice President and SPO

Air Permit No. 0050014-012-AC
Lansing Smith Plant
SNCR/HERT and MOBOTEC Projects
Bay County

Enclosed is the final air construction permit, which authorizes Gulf Power Company to perform two demonstration projects to evaluate control technologies intended to reduce nitrogen oxides and mercury emissions. The proposed work will be conducted at the Lansing Smith Plant, which is located in Bay County at 4300 County Road in Lynn Haven, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made to the permit as drafted. This 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 L Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit and Final Determination) was sent by electronic mail with received receipt requested before the close of business on 9/21/07 to the persons listed below.

Ms. Penny Manuel, Gulf Power Company (pmmanuel@southernco.com)
Mr. Glenn Waters, Gulf Power Company (gdwaters@southernco.com)
Mr. Tom Davis, ECT, Inc. (tdavis@ectinc.com)
Ms. Kathleen Forney, EPA Region 4 (Forney.Kathleen@epa.gov)
Mr. Rick Bradburn, NWD Office (Rick.Bradburn@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.

Mary D. Harvey (Clerk) 9/21/07 (Date)

FACILITY AND PROJECT DESCRIPTION

The purpose of this project is to authorize Gulf Power Company to conduct two temporary projects to evaluate control technologies intended to reduce NOx and mercury emissions for the Lansing Smith Plant. This facility is affected by the Clean Air Interstate Rule (CAIR) which regulates nitrogen oxides (NOx) emissions beginning in year 2009. Gulf Power's CAIR strategy for the Lansing Smith Plant includes the installation of a selective non-catalytic reduction (SNCR) system for Units 1 and 2. To determine the optimal urea injection locations for the SNCR system, Gulf Power will hire Advanced Combustion Technology to install a temporary SNCR rig and conduct high energy reagent technology (HERT) demonstration tests on Units 1 and 2 to assist in the development of the future control technologies.

The Lansing Smith Plant is also affected by the Clean Air Mercury Rule (CAMR), which requires statewide reductions in mercury emissions beginning in year 2010. Gulf Power is currently evaluating alternative mercury control technologies, including sorbent injection to increase mercury collection efficiencies from the existing pollution control equipment. Gulf Power has selected Reaction Engineering International to conduct a temporary demonstration project of MOBOTEC with MinPlus on Unit 2 to test the effectiveness for mercury collection. The test will be conducted to evaluate the best injection locations and furnance temperatures to achieve the maximum mercury reduction levels, so that an effective mercury reduction system can be designed.

This project affects the following existing emissions units.

EU No.	Description
001	Emissions Unit 001 is a tangentially fired, dry bottom boiler. It is rated at a maximum heat input of 1,944.8 MMBtu per hour when firing pulverized coal and 153 million British thermal units (MMBtu) per hour when firing distillate fuel oil. Pulverized coal is the primary fuel for the boiler and distillate fuel oil is used as a back-up fuel. This is a Phase II Acid Rain Unit which requires the installation and operation of continuous emissions monitors. Particulate matter emissions are controlled by a hot side (Buell Model # BAL 2X34N333-4-3P) and a cold side (General Electric Model # BE1.2X21(12)30-1.5-1.5-4.2P) electrostatic precipitator.
002	Emissions Unit 002 is a tangentially fired, dry bottom boiler. It is rated at a maximum heat input of 2,246.2 MMBtu per hour when firing pulverized coal and 76 MMBtu per hour when firing distillate fuel oil. Pulverized coal is the primary fuel for the boiler and distillate fuel oil is used as a back-up fuel. This is a Phase II Acid Rain Unit which requires the installation and operation of continuous emissions monitors. Particulate matter emissions are controlled by a hot side (Buell Model # BAL 2X34N333-4-3P) and a cold side (GE-ESI Model # BE2.1X(2-12's)(12)-30-111-4.3P) electrostatic precipitator.

REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants.
- The facility has 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 (PSD), F.A.C.

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

Gulf Power Company
One Energy Place
Pensacola, FL 32520-0328

Authorized Representative:
Penny Manuel, Vice President and SPO

Air Permit No. 0050014-012-AC
Permit Expires: November 1, 2008

Lansing Smith Plant
ARMS ID No. 0050014
SNCR/HERT and MOBOTEC Projects

PROJECT AND LOCATION

This permit authorizes Gulf Power Company to perform two demonstration projects to evaluate control technologies intended to reduce nitrogen oxides and mercury emissions. The proposed work will be conducted at the Lansing Smith Plant, which is an existing electrical generating power plant (SIC No. 4911). The facility is located in Bay County at 4300 County Road 2300 in Lynn Haven, Florida. The UTM coordinates are Zone 16, 625.03 km east, and 3349.08 km north.

STATEMENT OF BASIS

This air pollution 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 permittee is authorized to conduct the proposed work 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.

CONTENTS

Executed in Tallahassee, Florida

Joseph Kahn, Director
Division of Air Resource Management

9/21/2007
(Date)

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Bureau of Air Regulation, Division of Air Resource Management, Florida Department of Environmental Protection (DEP). The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall 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 Northwest District Office. The mailing address and phone number of the Northwest District Office is: 160 Governmental Center, Pensacola, Florida 32505 and Phone number (850) 595-8300.

3. Appendices: The following Appendices are attached as part of this permit: Appendix A. (Citation Formats and Glossary of Common Terms) and Appendix B. (General Conditions).

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 and current Title V air operation permit. 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, 62-296, 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.

5. 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.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. 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. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Title V Permit: The scope of this temporary project is to develop information in support of a permanent project. A future request for permanent authorization would require a new air construction permit and subsequent revision to the Title V air operation permit. [Rule 62-213.400, F.A.C.]

A. SNCR/HERT Project

This section of the permit addresses the following emissions unit.

ID	Emission Unit Description
001	Boiler Number 1 (Phase II Acid Rain Unit)
002	Boiler Number 2 (Phase II Acid Rain Unit)

1. Other Permits: This permit supplements all other air construction and operation permits for the affected emissions units and does not alter any requirements from such previously issued air permits. The permittee shall comply with all applicable requirements in the current Title V air operation permit.
2. Authorization: The permittee is authorized to conduct the temporary demonstration project to evaluate the SNCR/HERT system for EU-001 and EU-002. Temporary equipment associated with this project includes a selective non-catalytic reduction system. [Application No. 0050014-012-AC]
3. Compliance Authority: At least 5 days prior to conducting the tests, the permittee shall provide a schedule of the test program to the Compliance Authority. The Compliance Authority may waive the 5-day advance notice requirement. The schedule may be updated as necessary.
4. NOx Emissions: Based on existing continuous emissions monitoring system (CEMS) data, the permittee shall determine the baseline NOx emissions before the demonstration project. During the tests, the permittee shall record the reagent injection rate for each injector location and load configuration. Based on CEMS data, the permittee shall determine the NOx emissions and control efficiencies for the demonstration equipment and each injector/load configuration.
5. Test Schedule: Once started, the test shall be completed within 30 days. If the permit has not expired, the permittee may request additional time to complete the testing program from the Bureau of Air Regulation.
6. Report: Within 45 days of completing the testing program, the permittee shall submit a report summarizing the following: test program and procedures, data collection methods, tested configurations, reagent injection rates and NOx reductions achieved. A copy of the report shall be submitted to the Compliance Authority.

B. MOBOTEC with MinPlus

This section of the permit addresses the following emissions unit.

ID	Emission Unit Description
002	Boiler Number 2 (Phase II Acid Rain Unit)

1. Other Permits: This permit supplements all other air construction and operation permits for the affected emissions units and does not alter any requirements from such previously issued air permits. The permittee shall comply with all applicable requirements in the current Title V air operation permit.

2. Authorization: The permittee is authorized to conduct the temporary demonstration project to evaluate the MOBOTEC with MinPlus system. Temporary equipment associated with this project includes a modified furnance/burner design and a dry sorbent injection consisting of a sorbent storage bin, a positive displacement blower, and rotary feeders. [Application No. 0050014-012-AC]

3. Compliance Authority: At least 5 days prior to conducting the tests, the permittee shall provide a schedule of the test program to the Compliance Authority. The Compliance Authority may waive the 5-day advance notice requirement. The schedule may be updated as necessary.

4. Mercury Emissions: The permittee shall determine the baseline mercury emissions prior to the demonstration project. During the tests, the permittee shall record the sorbent injection rate for each MOBOTEC/load configuration using the sorbent trap method or other equivalent methods. The permittee shall determine the mercury emissions and reductions for each configuration.

5. Test Schedule: Once stared, the tests shall be completed within 30 days. If the permit has not expired, the permittee may request additional time to complete the testing program from the Bureau of Air Regulation.

6. Report: Within 60 days of completing the MOBOTEC with MinPlus testing program, the permittee shall submit a report to the Bureau of Air Regulation summarizing the following: the test program and procedures data collection methods, tested configurations, sorbent injection rates, and mercury reductions achieved.

CONTENTS

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 CRF 60.7]

Means: Title 40, Part 60, Section 7

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 and 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

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 (not applicable);
    b. Determination of Prevention of Significant Deterioration (not applicable); and
    c. Compliance with New Source Performance Standards (not 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.

One Energy Place
Pensacola, Florida 32520

GULF POWER
A SOUTHERN COMPANY

Certified Mail

September 6, 2007

Ms. Corrie Branum
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Mail Station #5510
Tallahassee, Florida 32399-2400

Dear Ms. Branum:

RE: LANSING SMITH ELECTRIC GENERATION FACILITY
DEP File No. 0050014-012-AC
HERT and Mobotec Construction Permit - Public Notice Affidavit

Attached, please find Gulf Power's proof of publication, i.e.,newspaper affidavit regarding the Public Notice of Intent to Issue Draft Smith HERT and MoBotec Construction Permit originally dated to Penny M. Manuel (Gulf Power) on August 15, 2007; received August 27, 2007. An electronic (pfd) version of this affidavit was sent you earlier today.

Please let me know if you have any questions regarding this matter and if you receive any public comments regarding this permit.

Sincerely,

Dwain Waters, Q.E.P.

G. Dwain Waters, Q.E.P.
Special Projects and Environmental Assets Coordinator

Cc: Jim Vick, Gulf Power Company
Marie Largilliere, Gulf Power Company
Rick Bradburn, FDEP, Northwest District

Florida Freedom Newspapers, Inc.

PUBLISHERS OF THE NEWS HERALD
Panama City, Bay County, Florida
Published Daily

State of Florida
County of Bay

Before the undersigned authority appeared Glenda Sullivan, who on oath says that she is Classified In-Column Manager of The News Herald, a daily newspaper published at Panama City, in Bay County, Florida; that the attached copy of advertisement, being a legal advertisement - #5271 in the matter of Public Notice of Intent to Issue Air Permit in the Bay County Court, was published in said newspaper in the issue of September 3, 2007

Affiant further says that The News Herald is a direct successor of the Panama City News and that this publication, together with its direct predecessor, has been continuously published in said Bay County, Florida, each day (except that the predecessor, Panama City News, was not published on Sundays), and that this publication together with its said predecessor, has been entered as periodicals matter at the post office in Panama City, in said Bay County, Florida, for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he or she 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.

Glenda Sullivan

State of Florida
County of Bay
Sworn and subscribed before me this 4th day of September , A.D., 2007, by Glenda Sullivan, Classified In-Column Manager of The News Herald, who is personally known to me or has produced N/A as identification.

MARIE L. FORREST
Commission DD 667091
Expires May 5, 2011
Bonded Thru Troy Fain Insurance 800-385-7019

Marie L Forrest
Notary Public, State of Florida at Large

RECEIVED
SEP 10 2007
BUREAU OF AIR REGULATION

5271
PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection Division of Air Resource Management, Bureau of Air Regulation, Draft Air Permit No. 0050014-012-AC, Gulf Power Company, Lansing Smith Plant, Bay County, Florida

Applicant: The applicant for this project is Gulf Power Company. The applicant's authorized representative and mailing address is: Penny Manuel, Vice President and SPO, Gulf Power Company, Lansing Smith Plant, One Energy Place, Pensacola, FL 32520-0001.

Facility Location: Gulf Power Company operates the existing Lansing Smith Plant, which is located in Bay County at 4300 County Road 2300 in Lynn Haven, Florida. The UTM coordinates are Zone 16, 625.03 km east and 3349.08 km north.

Project: The purpose of this project is to authorize Gulf Power Company to conduct two temporary projects to evaluate control technologies intended to reduce nitrogen oxides (NOx) and mercury emissions for Units 1 and 2 at the Lansing Smith Plant. This facility is affected by the Clean Air Interstate Rule (CAIR) which regulates NOx emissions beginning in year 2009. Gulf Power's CAIR strategy for the Lansing Smith Plant includes the installation of a selective non-catalytic reduction system (SNCR) for Units 1 and 2. To determine the optimal urea injection locations for the SNCR system, Gulf Power will install a temporary SNCR rig and conduct high energy reagent technology (HERT) demonstration tests on Units 1 and 2 to assist in the development of the future control technologies.

The Lansing Smith Plant is also affected by the Clean Air Mercury Rule (CAMR) which requires statewide reductions in mercury emissions beginning in year 2010. Gulf Power is currently evaluating alternative mercury control technologies, including sorbent injection, to increase mercury collection efficiencies from the existing pollution control equipment. Gulf Power will conduct a temporary demonstration project of MOBOTEC with MinPlus on Unit 2 to test the effectiveness for mercury collection. The test will be conducted to evaluate the best injection locations and furnace temperatures to achieve the maximum mercury reduction levels, so that an effective mercury reduction system can be designed.

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 postmarked 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

mercury reduction, if any, so that an effective mercury reduction system can be designed.

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. 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: http://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

(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.

September 3, 2007

Harvey, Mary

8/15/07

From: Adams, Patty
To: Harvey, Mary
Sent: Friday, August 17, 2007 9:52 AM
Subject: Read: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

Your message

To:	'Ms. Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney'; Bradburn, Rick
Cc:	Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject:	Air Construction Permit #0050014-012-DRAFT - Gulf Power Company
Sent:	8/15/2007 1:55 PM

was read on 8/17/2007 9:52 AM.

Harvey, Mary

From: Bradburn, Rick
To: Harvey, Mary
Sent: Thursday, August 16, 2007 9:11 AM
Subject: Read: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

Your message

To:	'Ms. Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney'; Bradburn, Rick
Cc:	Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject:	Air Construction Permit #0050014-012-DRAFT - Gulf Power Company
Sent:	8/15/2007 1:55 PM

was read on 8/16/2007 9:11 AM.

Harvey, Mary

From: Harvey, Mary
Sent: Wednesday, August 15, 2007 1:55 PM
To: 'Ms. Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney'; Bradburn, Rick
Cc: Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company
Attachments: 0050014.012.AC.D_pdf.zip

Tracking:

Recipient	Delivery	Read
'Ms. Penny Manuel, Gulf Power Company'		
'Mr. Glenn Waters, Gulf Power Company'		
'Mr. Tom Davis, ECT, Inc.'		
'Ms. Kathleen Forney'		
Bradburn, Rick	Delivered: 8/15/2007 1:55 PM	Read: 8/16/2007 9:11 AM
Branum, Corrie	Delivered: 8/15/2007 1:55 PM	Read: 8/15/2007 1:55 PM
Adams, Patty		Read: 8/17/2007 9:52 AM
Gibson, Victoria		Read: 8/15/2007 2:59 PM

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 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,

Harvey, Mary

From: Curle, Mary Beth
To: Harvey, Mary
Sent: Wednesday, August 15, 2007 2:06 PM
Subject: Read: FW: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

Your message

To: 'Mr. Jim Little, EPA Region 4'; 'Ms. Kathleen Forney'; Curle, Mary Beth
Subject: FW: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company
Sent: 8/15/2007 1:57 PM

was read on 8/15/2007 2:06 PM.

Harvey, Mary

From: Gibson, Victoria
To: Harvey, Mary
Sent: Wednesday, August 15, 2007 2:59 PM
Subject: Read: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

Your message

To:	'Ms. Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney'; Bradburn, Rick
Cc:	Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject:	Air Construction Permit #0050014-012-DRAFT - Gulf Power Company
Sent:	8/15/2007 1:55 PM

was read on 8/15/2007 2:59 PM.

Harvey, Mary

From: Branum, Corrie
To: Harvey, Mary
Sent: Wednesday, August 15, 2007 1:56 PM
Subject: Read: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

Your message

To:	'Ms. Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney'; Bradburn, Rick
Cc:	Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject:	Air Construction Permit #0050014-012-DRAFT - Gulf Power Company
Sent:	8/15/2007 1:55 PM

was read on 8/15/2007 1:55 PM.

Harvey, Mary

From: Tom Davis [tdavis@ectinc.com]
Sent: Wednesday, August 15, 2007 3:58 PM
To: Harvey, Mary
Subject: RE: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

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From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Wednesday, August 15, 2007 1:55 PM
To: Ms. Penny Manuel, Gulf Power Company; Mr. Glenn Waters, Gulf Power Company; Mr. Tom Davis, ECT, Inc.; Ms. Kathleen Forney; Bradburn, Rick
Cc: Branum, Corrie; Adams, Patty; Gibson, Victoria
Subject: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

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 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,

Harvey, Mary

From: Forney.Kathleen@epamail.epa.gov
Sent: Wednesday, August 15, 2007 3:46 PM
To: Harvey, Mary
Cc: little.james@epa.gov; Curle, Mary Beth
Subject: Re: FW: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

Attachments: 0050014-012-AC Appendix - AC Minor - DRAFT.PDF; 0050014-012-AC Draft Permit - DRAFT.PDF; 0050014-012-AC Public Notice - DRAFT.PDF; 0050014-012-AC TEPD - DRAFT.PDF; 0050014-012-AC Written Notice - DRAFT.PDF; Signed documents for Project # 0050014-012-Draft - Gulf Power.pdf


0050014-012-AC Appendix - AC M...


0050014-012-AC Draft Permit - ...


0050014-012-AC Public Notice -...


0050014-012-AC TEPD - DRAFT.PD...


0050014-012-AC Written Notice ...


Signed documents for Project #...

Thanks for sending the document.
KT

Katy R. Forney
Air Permits Section
EPA - Region 4
61 Forsyth St., SW
Atlanta, GA 30024

Phone: 404-562-9130
Fax: 404-562-9019

"Harvey, Mary" <Mary.Harvey@dep.state.fl.us>
08/15/2007 01:57 PM

To: James Little/R4/USEPA/US@EPA, Kathleen Forney/R4/USEPA/US@EPA, "Curle, Mary Beth" <Mary.Beth.Curle@dep.state.fl.us>
cc:
Subject: FW: Air Construction Permit #0050014-012-DRAFT - Gulf Power Company

From: Harvey, Mary
Sent: Wednesday, August 15, 2007 1:55 PM
To: 'Ms. Penny Manuel, Gulf Power Company'; 'Mr. Glenn Waters, Gulf Power Company'; 'Mr. Tom Davis, ECT, Inc.'; 'Ms. Kathleen Forney'; Bradburn, Rick
Cc: Branum, Corrie; Adams, Patty; Gibson, Victoria

Florida Department of
Environmental Protection

Memorandum

TO: Trina Vielhauer, Bureau of Air Regulation
THROUGH: Jeff Koerner, Air Permitting North Section JK
FROM: Corrie Branum, Air Permitting North Section CB
DATE: August 15, 2007
SUBJECT: Draft Air Permit No. 0050014-012-AC
Gulf Power Company, Lansing Smith Plant
HERT and MOBOTEC Demonstration Project

This project is subject to minor source preconstruction review. Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit;
- Public Notice of Intent to Issue Air Permit;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- P.E. Certification.

The Draft Permit authorizes Gulf Power Company to perform two demonstration projects to evaluate control technologies for Units 1 and 2: SNCR/HERT for NOx and MOBOTEC with MinPlus for mercury. The proposed work will be conducted at Lansing Smith Plant, which is located in Bay County, Florida. The Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for issuance. The P.E. certification briefly summarizes the proposed project. I recommend your approval of the attached Draft Permit.

Attachments

P.E. CERTIFICATION STATEMENT

PERMITTEE

Gulf Power Company
Lansing Smith Plant
4300 County Road 2300
Lynn Haven, FL 32409

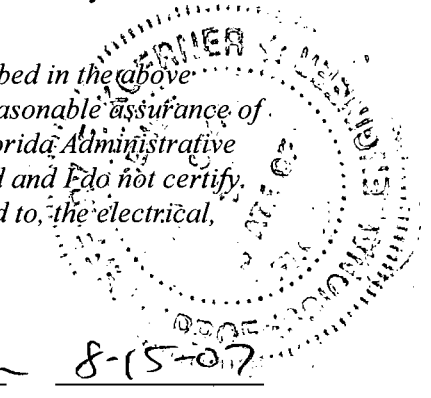
Draft Air Permit No. 0050014-012-AC
Lansing Smith Plant, Units 1 and 2
SNCR/HERT and MOBOTEC
Demonstration Projects
Bay County, Florida

PROJECT DESCRIPTION

This project authorizes Gulf Power Company to conduct two temporary projects to evaluate control technologies intended to reduce nitrogen oxides (NOx) and mercury emissions for Units 1 and 2 at the Lansing Smith Plant. This facility is affected by the Clean Air Interstate Rule (CAIR) which regulates NOx emissions beginning in year 2009. Gulf Power's CAIR strategy for the Lansing Smith Plant includes the installation of a selective non-catalytic reduction system (SNCR) for Units 1 and 2. To determine the optimal urea injection locations for the SNCR system, Gulf Power will install a temporary SNCR rig and conduct high energy reagent technology (HERT) demonstration tests on Units 1 and 2 to assist in the development of the future control technologies.

The Lansing Smith Plant is also affected by the Clean Air Mercury Rule (CAMR), which requires statewide reductions in mercury emissions beginning in year 2010. Gulf Power is currently evaluating alternative mercury control technologies, including sorbent injection to increase mercury collection efficiencies from the existing pollution control equipment. Gulf Power will conduct a temporary demonstration project of MOBOTEC with MinPlus on Unit 2 to test the effectiveness for mercury collection. The test will be conducted to evaluate the best injection locations and furnace temperatures to achieve the maximum mercury reduction levels, so that an effective mercury reduction system can be designed.

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



Jeffery F. Koerner, P.E.
Registration Number: 49441

8-15-07
(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

August 15, 2007

Ms. Penny Manuel, Vice President and SPO
Gulf Power Company
One Energy Place
Pensacola, FL 32520-0001

Re: Air Construction Permit No. 0050014-012-AC
Gulf Power Company, Lansing Smith Plant
HERT and MOBOTEC Demonstration Projects

Dear Ms. Manuel:

On June 8, 2007, you submitted an application requesting authorization to perform two demonstration projects to evaluate control technologies for Units 1 and 2: SNCR/HERT for nitrogen oxides (NOx) and MOBOTEC with MinPlus for mercury. These units are installed at the existing Lansing Smith Plant, which is located in Bay County at 4300 County Road 2300, Lynn Haven, Florida. Enclosed are the following documents:

- The Technical Evaluation and Preliminary Determination summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a Draft Permit.
- The proposed Draft Permit includes the specific conditions that regulate the emissions units covered by the proposed project.
- The Written Notice of Intent to Issue Air Permit provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation.
- 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, Jeff Koerner, at 850/921-9536.

Sincerely,

Trina L Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an
Application for Air Permit by:

Gulf Power Company
One Energy Place
Pensacola, FL 32520-0001

Authorized Representative:
Penny Manuel, Vice President and SPO

Air Permit No. 0050014-012-AC
Facility ID No. 0050014
Lansing Smith Plant
HERT and MOBOTEC Demonstration Projects
Bay County, Florida

Facility Location: Gulf Power Company operates the Lansing Smith Plant, which is located in Bay County at 4300 County Road 2300 in Lynn Haven, Florida.

Project: The purpose of this project is to authorize Gulf Power Company to conduct two temporary projects to evaluate control technologies intended to reduce nitrogen oxides (NOx) and mercury emissions for Units 1 and 2 at the Lansing Smith Plant. This facility is affected by the Clean Air Interstate Rule (CAIR) which regulates NOx emissions beginning in year 2009. Gulf Power's CAIR strategy for the Lansing Smith Plant includes the installation of a selective non-catalytic reduction system (SNCR) for Units 1 and 2. To determine the optimal urea injection locations for the SNCR system, Gulf Power will install a temporary SNCR rig and conduct high energy reagent technology (HERT) demonstration tests on Units 1 and 2 to assist in the development of the future control technologies.

The Lansing Smith Plant is also affected by the Clean Air Mercury Rule (CAMR), which requires statewide reductions in mercury emissions beginning in year 2010. Gulf Power is currently evaluating alternative mercury control technologies, including sorbent injection to increase mercury collection efficiencies from the existing pollution control equipment. Gulf Power will conduct a temporary demonstration project of MOBOTEC with MinPlus on Unit 2 to test the effectiveness for mercury collection. The test will be conducted to evaluate the best injection locations and furnace temperatures to achieve the maximum mercury reduction levels, so that an effective mercury reduction system can be designed.

Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

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. 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

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.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Trina L Vielhauer

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 with received receipt requested before the close of business on 8/15/07 to the persons listed below.

Ms. Penny Manuel, Gulf Power Company (pmmanuel@southernco.com)
Mr. Glenn Waters, Gulf Power Company (gdwaters@southernco.com)
Mr. Tom Davis, ECT, Inc. (tdavis@ectinc.com)
Ms. Kathleen Forney (Forney.Kathleen@epa.gov)
Mr. Rick Bradburn, NWD Office (Rick.Bradburn@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.

Mary F. Harvey (Clerk) 8/15/07 (Date)

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 place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 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 postmarked 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

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft Air Permit No. 0050014-012-AC
Gulf Power Company, Lansing Smith Plant
Bay County, Florida

Applicant: The applicant for this project is Gulf Power Company. The applicant's authorized representative and mailing address is: Penny Manuel, Vice President and SPO, Gulf Power Company, Lansing Smith Plant, One Energy Place, Penscola, FL, 32520-0001.

Facility Location: Gulf Power Company operates the existing Lansing Smith Plant, which is located in Bay County at 4300 County Road 2300 in Lynn Haven, Florida. The UTM coordinates are Zone 16, 625.03 km east and 3349.08 km north.

Project: The purpose of this project is to authorize Gulf Power Company to conduct two temporary projects to evaluate control technologies intended to reduce nitrogen oxides (NOx) and mercury emissions for Units 1 and 2 at the Lansing Smith Plant. This facility is affected by the Clean Air Interstate Rule (CAIR) which regulates NOx emissions beginning in year 2009. Gulf Power's CAIR strategy for the Lansing Smith Plant includes the installation of a selective non-catalytic reduction system (SNCR) for Units 1 and 2. To determine the optimal urea injection locations for the SNCR system, Gulf Power will install a temporary SNCR rig and conduct high energy reagent technology (HERT) demonstration tests on Units 1 and 2 to assist in the development of the future control technologies.

The Lansing Smith Plant is also affected by the Clean Air Mercury Rule (CAMR), which requires statewide reductions in mercury emissions beginning in year 2010. Gulf Power is currently evaluating alternative mercury control technologies, including sorbent injection to increase mercury collection efficiencies from the existing pollution control equipment. Gulf Power will conduct a temporary demonstration project of MOBOTEC with MinPlus on Unit 2 to test the effectiveness for mercury collection. The test will be conducted to evaluate the best injection locations and furnace temperatures to achieve the maximum mercury reduction levels, so that an effective mercury reduction system can be designed.

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. 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: http://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 a period of 14 days from the date of publication of the Public Notice. Written comments must be postmarked 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

PROJECT

Draft Air Construction Permit No. 0050014-012-AC
HERT and MOBOTEC Demonstration Project

COUNTY

Bay

APPLICANT

Gulf Power Company
Lansing Smith Plant
ARMS Facility ID No. 0050014

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Air Permitting North Program

August 15, 2007

1. GENERAL PROJECT INFORMATION

Applicant Name and Address

Gulf Power
One Energy Place
Pensacola, FL 32520-0328
Authorized Representative: Penny Manuel, Vice President and SPO

Facility Description and Location

Gulf Power Company operates an existing electrical generating power plant (SIC No. 4911) located in Bay County at 4300 County Road in Lynn Haven, Florida. The UTM coordinates are Zone 16, 625.03 km east and 3349.08 km north. This facility consists of two coal fired steam generators (boilers), two combustion turbines driven by a single jet engine, two new gas-fired combined-cycle combustion turbine electrical generators with duct-fired heat recovery steam generators (HRSG), and miscellaneous unregulated/insignificant emissions units and/or activities. Emissions Unit 001 is a tangentially fired, dry bottom boiler. It is rated at a maximum heat input of 1,944.8 million British thermal units (MMBtu) per hour when firing pulverized coal and 153 MMBtu per hour when firing distillate fuel oil. Emissions Unit 002 is a tangentially fired, dry bottom boiler. It is rated at a maximum heat input of 2,246.2 MMBtu per hour when firing pulverized coal and 76 MMBtu per hour when firing distillate fuel oil. Pulverized coal is the primary fuel for the boilers. Distillate fuel oil is used to fire the jet engine and as a back-up fuel for the boilers. Both units are Phase II Acid Rain Units. These emissions units pre-date Prevention of Significant Deterioration (PSD) regulations, but are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with more than 250 million Btu per Hour Heat Input. PM emissions from both units are controlled by a hot-side and a cold-side electrostatic precipitator. Units 1 and 2 share a common stack.

Regulatory Categories

- The facility is a major source of hazardous air pollutants.
- 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, Florida Administrative Code (F.A.C.)
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the PSD of Air Quality.

Project Description

On June 8, 2007, the Department received an application from Gulf Power for the Lansing Smith Plant, which is affected by the Clean Air Interstate Rule (CAIR) that regulates NOx emissions beginning in year 2009. Gulf Power's CAIR strategy includes the installation of a selective non-catalytic reduction system (SNCR) for Units 1 and 2. To determine the optimal urea injection locations for the SNCR system, Gulf Power will hire Advanced Combustion Technology (ACT) to install a temporary SNCR rig and conduct high energy reagent technology (HERT) demonstration tests on Units 1 and 2 to assist in the development of the future control technologies. During each day of the test, ACT will provide the test skid, setup and optimization of the system to gather the data needed for the SNCR system design. The tests will last a total of six days. Approximately two days of testing will be performed at high load conditions, and one day at medium and low load conditions for both units. The target performance for each unit is a 30% NOx reduction with a maximum ammonia slip of 5 ppm. During the tests they will use the existing continuous emissions monitoring systems (CEMS) to monitor the NOx reductions. Gulf Power Company does not expect any increased emissions from this demonstration project.

The Lansing Smith Plant is also affected by the Clean Air Mercury Rule (CAMR), which requires statewide reductions in mercury emissions beginning in year 2010. Gulf Power is currently evaluating alternative mercury control technologies, including sorbent injection to increase mercury collection efficiencies from the existing pollution control equipment. Gulf Power has selected Reaction Engineering International (REI) to conduct a temporary demonstration project of MOBOTEC with MinPlus on Unit 2 to test the effectiveness for mercury collection. Temporary additional equipment includes a sorbent bin, positive displacement blower and rotary feeders for injecting sorbent. Two days of baseline sampling measurements will be taken followed by four days of continuous sorbent injection with parametric testing. The test will run continuously for approximately 2 weeks. The purpose of the test is to evaluate the best injection locations and furnace temperatures to achieve the maximum mercury reduction level. From this data, a system can be designed to effectively reduce mercury emissions. During this test, fugitive emissions from the sorbent will be minimized by a filter in the hopper. Gulf Power anticipates that total particulate matter (PM) and PM_{10} emissions may increase less than one ton for the entire test.

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable rules and regulations defined in the following Chapters of the F.A.C.: 62-4 (Permitting Requirements); 62-210 (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms); 62-212 (Preconstruction Review, PSD Review and BACT, and Non-attainment Area Review and LAER); 62-213 (Title V Air Operation Permits for Major Sources of Air Pollution); 62-296 (Emission Limiting Standards); and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures).

PSD Applicability for Project

This is a temporary project to evaluate control technologies intended to reduce NOx and mercury emissions. Any predicted emissions increases will be minor and well below PSD "significant emissions rates" as defined in Rule 62-210.200, F.A.C. Therefore, the project is not subject to PSD preconstruction review.

3. DEPARTMENT REVIEW

SNCR/HERT Project

The draft permit will authorize the temporary project to evaluate the SNCR/HERT system subject to the following primary conditions:

- The draft permit will be valid and allow testing within a 12-month window.
- At least 5 days prior to conducting the tests, the permittee shall provide a schedule of the test program to the Compliance Authority. The Compliance Authority may waive the 5-day advance notice requirement.
- Based on CEMS data, the permittee shall determine the baseline NOx emissions before the demonstration project.
- During the tests, the permittee shall record the reagent injection rate for each injector location and load configuration.
- Based on CEMS data, the permittee shall determine the NOx emissions and control efficiencies for the demonstration equipment and each injector/load configuration.
- Once started the test shall be completed within 14 days. If the permit has not expired, the permittee may request additional time to complete the testing program from the Bureau of Air Regulation.

- Within 45 days of completing the testing program, the permittee shall submit a report summarizing the following: test program and procedures, data collection methods, tested configurations, reagent injection rates and NOx reductions achieved. A copy of the report shall be submitted to the Compliance Authority.

MOBOTEC with MinPlus Project

The draft permit will authorize the temporary project to evaluate MOBOTEC with MinPlus system subject to the following conditions:

- The draft permit will be valid and allow testing within a 12-month window.
- At least 5 days prior to conducting the tests, the permittee shall provide a schedule of the test program to the Compliance Authority. The Compliance Authority may waive the 5-day advance notice requirement.
- The permittee shall determine the baseline mercury emissions prior to the demonstration project using the sorbent trap method.
- During the tests, the permittee shall record the sorbent injection rate for each MOBOTEC/load configuration.
- The permittee shall determine the mercury emissions and reductions for each configuration using the sorbent trap method.
- Once stared, the tests shall be completed within 30 days. If the permit has not expired, the permittee may request additional time to complete the testing program from the Bureau of Air Regulation.
- Within 45 days of completing the MOBOTEC with MinPlus testing program, the permittee shall submit a report to the Bureau of Air Regulation summarizing the following: the test program and procedures data collection methods, tested configurations, sorbent injection rates, and mercury reductions achieved.

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. Corrie Branum 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

Gulf Power Company
One Energy Place
Pensacola, FL 32520-0328

Authorized Representative:
Penny Manuel, Vice President and SPO

Air Permit No. 0050014-012-AC
Permit Expires: (12 months from issuance)

Lansing Smith Plant
ARMS ID No. 0050014
SNCR/HERT and MOBOTEC Projects

PROJECT AND LOCATION

This permit authorizes Gulf Power Company to perform two demonstration projects to evaluate control technologies intended to reduce nitrogen oxides (NOx) and mercury emissions. The proposed work will be conducted at the Lansing Smith Plant, which is an existing electrical generating power plant (SIC No. 4911). The facility is located in Bay County at 4300 County Road 2300 in Lynn Haven, Florida. The UTM coordinates are Zone 16, 625.03 km east, and 3349.08 km north.

STATEMENT OF BASIS

This air pollution 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 permittee is authorized to conduct the proposed work 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.

CONTENTS

Executed in Tallahassee, Florida

(DRAFT)

Joseph Kahn, Director
Division of Air Resource Management

(Date)

FACILITY AND PROJECT DESCRIPTION

The purpose of this project is to authorize Gulf Power Company to conduct two temporary projects to evaluate control technologies intended to reduce NOx and mercury emissions for the Lansing Smith Plant. This facility is affected by the Clean Air Interstate Rule (CAIR) which regulates NOx emissions beginning in year 2009. Gulf Power's CAIR strategy for the Lansing Smith Plant includes the installation of a selective non-catalytic reduction (SNCR) system for Units 1 and 2. To determine the optimal urea injection locations for the SNCR system, Gulf Power will hire Advanced Combustion Technology to install a temporary SNCR rig and conduct high energy reagent technology (HERT) demonstration tests on Units 1 and 2 to assist in the development of the future control technologies.

The Lansing Smith Plant is also affected by the Clean Air Mercury Rule (CAMR), which requires statewide reductions in mercury emissions beginning in year 2010. Gulf Power is currently evaluating alternative mercury control technologies, including sorbent injection to increase mercury collection efficiencies from the existing pollution control equipment. Gulf Power has selected Reaction Engineering International to conduct a temporary demonstration project of MOBOTEC with MinPlus on Unit 2 to test the effectiveness for mercury collection. The test will be conducted to evaluate the best injection locations and furnance temperatures to achieve the maximum mercury reduction levels, so that an effective mercury reduction system can be designed.

This project affects the following existing emissions units.

EU No.	Description
001	Emissions Unit 001 is a tangentially fired, dry bottom boiler. It is rated at a maximum heat input of 1,944.8 MMBtu per hour when firing pulverized coal and 153 million British thermal units (MMBtu) per hour when firing distillate fuel oil. Pulverized coal is the primary fuel for the boiler and distillate fuel oil is used to fire the jet engine and as a back-up fuel for the boiler. This is a Phase II Acid Rain Unit which requires the installation and operation of continuous emissions monitors. Particulate matter emissions are controlled by a hot side (Buell Model # BAL 2X34N333-4-3P) and a cold side (General Electric Model # BE1.2X21(12)30-1.5-1.5-4.2P) electrostatic precipitator.
002	Emissions Unit 002 is a tangentially fired, dry bottom boiler. It is rated at a maximum heat input of 2,246.2 MMBtu per hour when firing pulverized coal and 76 MMBtu per hour when firing distillate fuel oil. Pulverized coal is the primary fuel for the boiler and distillate fuel oil is used to fire the jet engine and as a back-up fuel for the boiler. This is a Phase II Acid Rain Unit which requires the installation and operation of continuous emissions monitors. Particulate matter emissions are controlled by a hot side (Buell Model # BAL 2X34N333-4-3P) and a cold side (GE-ESI Model # BE2.1X(2-12's)(12)-30-111-4.3P) electrostatic precipitator.

REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has 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 (PSD), F.A.C.

1. Permitting Authority: The permitting authority for this project is the Bureau of Air Regulation, Division of Air Resource Management, Florida Department of Environmental Protection (DEP). The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northwest District Branch Office.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northwest District Branch Office. The mailing address and phone number of the Northwest District Branch Office is: 160 Governmental Center, Pensacola, Florida 32505 and Phone number (850) 595-8300.

3. Appendices: The following Appendices are attached as part of this permit: Appendix A. (Citation Formats and Glossary of Common Terms) and Appendix B. (General Conditions).

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 and current Title V air operation permit. 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, 62-296, 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.

5. 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.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. 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. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Title V Permit: The scope of this temporary project is to develop information in support of a permanent project. A future request for permanent authorization would require a new air construction permit and subsequent revision to the Title V air operation permit. [Rule 62-213.400, F.A.C.]

B. SNCR/HERT Project

This section of the permit addresses the following emissions unit.

ID	Emission Unit Description
001	Boiler Number 1 (Phase II Acid Rain Unit)
002	Boiler Number 2 (Phase II Acid Rain Unit)

1. Other Permits: This permit supplements all other air construction and operation permits for the affected emissions units and does not alter any requirements from such previously issued air permits. The permittee shall comply with all applicable requirements in the current Title V air operation permit.
2. Authorization: The permittee is authorized to conduct the temporary demonstration project to evaluate the SNCR/HERT system for EU-001 and EU-002. Temporary equipment associated with this project includes a selective non-catalytic reduction system. [Application No. 0050014-012-AC]
3. Compliance Authority: At least 5 days prior to conducting the tests, the permittee shall provide a schedule of the test program to the Compliance Authority. The Compliance Authority may waive the 5-day advance notice requirement. The schedule may be updated as necessary.
4. NOx Emissions: Based on existing continuous emissions monitoring system (CEMS) data, the permittee shall determine the baseline NOx emissions before the demonstration project. During the tests, the permittee shall record the reagent injection rate for each injector location and load configuration. Based on CEMS data, the permittee shall determine the NOx emissions and control efficiencies for the demonstration equipment and each injector/load configuration.
5. Test Schedule: Once started, the test shall be completed within 14 days. If the permit has not expired, the permittee may request additional time to complete the testing program from the Bureau of Air Regulation.
6. Report: Within 45 days of completing the testing program, the permittee shall submit a report summarizing the following: test program and procedures, data collection methods, tested configurations, reagent injection rates and NOx reductions achieved. A copy of the report shall be submitted to the Compliance Authority.

B. MOBOTEC with MinPlus

This section of the permit addresses the following emissions unit.

ID	Emission Unit Description
002	Boiler Number 2 (Phase II Acid Rain Unit)

1. Other Permits: This permit supplements all other air construction and operation permits for the affected emissions units and does not alter any requirements from such previously issued air permits. The permittee shall comply with all applicable requirements in the current Title V air operation permit.

2. Authorization: The permittee is authorized to conduct the temporary demonstration project to evaluate the MOBOTEC with MinPlus system. Temporary equipment associated with this project includes a modified furnance/burner design and a dry sorbent injection consisting of a sorbent storage bin, a positive displacement blower, and rotary feeders. [Application No. 0050014-012-AC]

3. Compliance Authority: At least 5 days prior to conducting the tests, the permittee shall provide a schedule of the test program to the Compliance Authority. The Compliance Authority may waive the 5-day advance notice requirement. The schedule may be updated as necessary.

4. Mercury Emissions: The permittee shall determine the baseline mercury emissions prior to the demonstration project using the sorbent trap method. During the tests, the permittee shall record the sorbent injection rate for each MOBOTEC/load configuration. The permittee shall determine the mercury emissions and reductions for each configuration using the sorbent trap method.

5. Test Schedule: Once stared, the tests shall be completed within 30 days. If the permit has not expired, the permittee may request additional time to complete the testing program from the Bureau of Air Regulation.

6. Report: Within 45 days of completing the MOBOTEC with MinPlus testing program, the permittee shall submit a report to the Bureau of Air Regulation summarizing the following: the test program and procedures data collection methods, tested configurations, sorbent injection rates, and mercury reductions achieved.

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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 CRF 60.7]

Means: Title 40, Part 60, Section 7

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 and 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

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 (not applicable);
    b. Determination of Prevention of Significant Deterioration (not applicable); and
    c. Compliance with New Source Performance Standards (not 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.

Department of
Environmental Protection
Division of Air Resource Management

SUBMITTED APPLICATION REPORT
APPLICATION FOR AIR PERMIT - LONG FORM

--- Form Effective 02/02/06 ---

Application Number: 1590- 1
Application Name: SMITH HERT & MOBOTEC DEMONSTRATION
Date Submitted: 08 June 2007

I. APPLICATION INFORMATION

Air Construction Permit - Use this form to apply for any air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes 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/renewal Title V air operation permit.

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) - Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: GULF POWER COMPANY
2. Site Name: LANSING SMITH PLANT
3. Facility Identification Number: 0050014
4. Facility Location...
   Street Address or Other Locator: 4300 COUNTY ROAD 2300
   4300 COUNTY ROAD 2300
   City: LYNN HAVEN County: BAY Zip Code: 32409

5. Relocatable Facility?	6. Existing Title V Permitted Facility
☐ Yes ☑ No	☐ Yes ☐ No

Application Contact

1. Application Contact Name:	Application Contact Job Title:
GLENN WATERS	Special Projects & Environmental Assets Coordinator

2. Application Contact Mailing Address...

Organization/ Firm: GULF POWER

Street Address: ONE ENERGY PLACE

City: PENSACOLA State: FL Zip Code: 32520-0328

3. Application Contact Telephone Numbers...

Telephone: (850) 444-6527 ext. Fax: (850) 444-6217

4. Application Contact Email Address: gdwaters@southernco.com

Purpose of Application

This application for air permit is 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 construction project is to gather engineering and plant performance data for the purpose of designing control strategies to meet CAIR and CAMR. Two demonstration projects are proposed for nitrogen oxides and mercury emissions reduction. The HERT (High Energy Reagent Technology) project is a NOx Selective Non-Catalytic Reduction demonstration test to validate the technology and to determine optimal injection locations. The MOBOTEC Project is an EPRI research sponsored mercury sorbent removal technology demonstration to gather data for future engineering and design work.

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type
2	BOILER NUMBER 2 - 2,246.2 MMBTU/HOUR (PHASE II ACID RAIN)	AC1F
1	BOILER NUMBER 1 - 1,944.8 MMBTU/HOUR (PHASE II ACID RAIN)	AC1F

Note: The fee calculation information associated with this application may be accessed from the Main Menu of ESPAP.

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name: PENNY MANUEL
   Owner/Authorized Representative Job Title: Vice President and SPO

2. Owner/Authorized Representative Mailing Address...
   Organization/ Firm: GULF POWER COMPANY
   Street Address: ONE ENERGY PLACE
   City: PENSACOLA State: FL Zip Code: 32520-0001

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: (850) 444-6383 ext. Fax: (850) 444-6744

4. Owner/Authorized Representative Email Address: pmmanuel@southernco.com

5. Owner/Authorized Representative Statement:

   By entering my PIN below, I certify that I am the owner/authorized representative of the facility 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 requirements identified in this application to which the facility 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.

Professional Engineer Certification

1. Professional Engineer Name: TOM DAVIS
   Registration Number: 36777
   Professional Engineer Job Title: Principal Engineer

2. Professional Engineer Mailing Address...
   Organization/ Firm: ECT, INC.
   Street Address: 11211 NW 98TH STREET
   City: GAINESVILLE State: FL Zip Code: 32606-5004

3. Professional Engineer Telephone Numbers...
   Telephone: (352) 248-3351 ext. Fax: (352) 332-6722

4. Professional Engineer Email Address: TDAVIS@ECTINC.COM

5. Professional Engineer Statement:

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

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit (s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

(4) If the purpose of this application is to obtain an air construction permit (check here ☑ , 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 ☐ , 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.

(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 ☐, 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.

* Explain any exception to the certification statement.

Professional Engineer Exception Statement:

II. FACILITY INFORMATION
A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 16 East (km) 625.03 North (km) 3349.08		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 30° 16` 8" N Longitude (DD/MM/SS) 85° 42` 1" W	
3. Governmental Facility Code: (0) NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR LOCAL GOVERNMENT	4. Facility Status Code: Active	5. Facility Major Group SIC Code: (49) ELECTRIC, GAS AND SANITARY SERVICES	6. Facility SIC(s): Primary: 4911
7. Facility Comment:			

Facility Contact

1. Facility Contact Name: MARIE LARGILLIERE	Facility Contact Job Title: Compliance Team Leader
2. Facility Contact Mailing Address... Organization/ Firm: GULF POWER COMPANY Street Address: ONE ENERGY PLACE City: PENSACOLA State: FL Zip Code: 32520-0350	
3. Facility Contact Telephone Numbers... Telephone: (850) 520-3490 ext. Fax: (850) 520-3451	
4. Facility Contact Email Address:	

Facility Regulatory Classifications Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown

2. ☐ Synthetic Non-Title V Source
3. ☑ Title V Source
4. ☑ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs
6. ☑ Major Source of Hazardous Air Pollutants (HAPs)
7. ☐ Synthetic Minor Source of HAPs
8. ☑ One or More Emissions Units Subject to NSPS (40 CFR Part 60)
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))
12. Facility Regulatory Classifications Comment:

List of Pollutants Emitted by Facility

1. Pollutants Emitted	2. Pollutant Classification	Emissions Cap [Y or N]?
NOX	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	Y
PM	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
CO	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
SO2	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
PM10	(A) ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS.	N
VOC	(B) ACTUAL AND POTENTIAL EMISSIONS BELOW ALL APPLICABLE MAJOR SOURCE THRESHOLDS	N
PB	(B) ACTUAL AND POTENTIAL EMISSIONS BELOW ALL APPLICABLE MAJOR SOURCE THRESHOLDS	N
H107	(C) CLASS IS UNKNOWN	N
H106	(C) CLASS IS UNKNOWN	N
SAM	(C) CLASS IS UNKNOWN	N
TH	(C) CLASS IS UNKNOWN	N
H150	(C) CLASS IS UNKNOWN	N
H046	(C) CLASS IS UNKNOWN	N
H027	(C) CLASS IS UNKNOWN	N
H015	(C) CLASS IS UNKNOWN	N
HAPS	(C) CLASS IS UNKNOWN	N

B. Emissions Caps

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
NOX	Yes	All		6666	AMBIENT

7. Facility-Wide or Multi-Unit Emissions Cap Comment:
NOX: Smith has a facility-wide emissions cap for NOx per the Gulf-FDEP Ozone Agreement.

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☑ Previously Submitted, Date: 22-JUN-04 ☐ Attachment

2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☑ Previously Submitted, Date: 22-JUN-04 ☐ Attachment

3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☑ Previously Submitted, Date: 22-JUN-04 ☐ Attachment

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: (Not applicable for existing permitted facility)

☐ Applicable ☐ Attachment

2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):

☐ Applicable ☐ Attachment

3. Rule Applicability Analysis:

☑ Applicable ☑ Attachment

4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): (Not applicable if no exempt units at facility)

☐ Applicable ☐ Attachment

5. Fugitive Emissions Identification: ☐ Applicable ☐ Attachment
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): ☐ Applicable ☐ Attachment
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): ☐ Applicable ☐ Attachment
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): ☐ Applicable ☐ Attachment
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): ☐ Applicable ☐ Attachment
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Applicable ☐ Attachment

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): (Not applicable if no exempt units at facility)

☐ Applicable ☐ Attachment

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications, but not for revision applications)

☐ Applicable ☐ Attachment

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):

☐ Applicable ☐ Attachment

3. Compliance Report and Plan: (Required for all initial/revision/renewal applications):

Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

☐ Applicable ☐ Attachment

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):

☐ Applicable ☐ Equipment/Activities On site but Not Required to be Individually Listed ☐ Attachment

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/ renewal applications only):

☐ Applicable ☐ Attachment

6. Requested Changes to Current Title V Air Operation Permit:

☐ Applicable ☐ Attachment

Other Information Regarding this Facility:

4. Other Facility Information:

☐ Included ☐ Attachment

Additional Requirements Comment

Facility Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Rule Applicability Analysis	DOCS-#262695-v1-Smith_Facility_list_-_FDEP.DOC	Updated facility rule analysis for FDEP requirements.	Yes	06/04/2007
	DOCS-#262692-v1-Smith_Facility_list_-_EPA_.DOC	Updated facility rule analysis for EPA requirements.	Yes	06/04/2007

III. EMISSIONS UNIT INFORMATION
A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☑ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☑ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
BOILER NUMBER 1 - 1,944.8 MMBTU/HOUR (PHASE II ACID RAIN)

3. Emissions Unit Identification Number: 1

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		11-MAY-65	49	☑ Yes ☐ No

9. Package Unit Model Number:
Manufacturer:

10. Generator Nameplate Rating: 175 MW

11. Emissions Unit Comment:
Units -001 and -002 share a common stack

Emissions Unit Control Equipment

Code	Equipment	Description
10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	Hot Precipitator Buell Model #BAL 2X34N333-4-3P and Cold Precipitator General Electric Model #BE1.2X21(12) 30-1.5-1.5-4.2P
107	SELECTIVE NONCATALYTIC REDUCTION FOR NOX	The HERT Project is a SNCR demonstration project.

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 1944.8 million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8760 hours/year
6. Operating Capacity/Schedule Comment: Coal. 153 mmBtu/hr for #2 fuel oil and "on-spec" used oil. Compliance by fuel records.

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code: 2 - An emission point serving 2 or more EU's capable of simultaneous operation
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: • 2 - BOILER NUMBER 2 - 2,246.2 MMBTU/HOUR (PHASE II ACID RAIN)		
5. Discharge Type Code: (V) A STACK WITH AN UNOBSTRUCTED OPENING DISCHARGING IN A VERTICAL/NEARLY VERTICAL DIRECTION	6. Stack Height: 199 feet	7. Exit Diameter: 18 feet
8. Exit Temperature: 260° F	9. Actual Volumetric Flow Rate: 1567967 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates... Zone: 16 East (km): 625.2 North (km): 3349.1		14. Emission Point Latitude/ Longitude... Latitude: 30° 16' 7" N Longitude: 85° 41' 7" W
15. Emission Point Comment: Units -001 and -002 share a common stack.		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type): Boiler fired with Pulverized Bituminous Coal. Emissions related to tons burned.		
2. Source Classification Code (SCC): 10100212	3. SCC Units: Tons Bituminous Coal Burned	
4. Maximum Hourly Rate: 73.7	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 4.1	8. Maximum % Ash: 9.9	9. Million Btu per SCC Unit: 24
10. Segment Comment: Minimum MBTU per SCC unit is 23. Average MBTU is 24.		
Is this a valid segment? Yes		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type): Boiler fired with #2 fuel oil and "on spec." used oil. Emissions related to thousand gallons burned.		
2. Source Classification Code (SCC): 10100501	3. SCC Units: 1000 Gallons Distillate Oil (No. 1 & 2) Burned	
4. Maximum Hourly Rate: 1.11	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 138
10. Segment Comment: The maximum % Ash is approximately 0.05 %. Item 8 above will not accept low % number.		
Is this a valid segment? Yes		

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10101302	3. SCC Units: 1000 Gallons Waste Oil Burned	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 132
10. Segment Comment: Used oil specification: Arsenic 5 PPM, Cadmium 2 PPM, Chromium 10 PPM, Lead 100 PPM, Total Halogens 1000 PPM, PCB50 ppm.		
Is this a valid segment? Yes		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code	Valid?
CO			NS	Yes
H015			EL	Yes
H027			EL	Yes
H046			EL	Yes
H106				Yes
H107				Yes
H150			EL	Yes
HAPS				Yes
NOX			EL	Yes
PB			EL	Yes
PM	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
PM10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
SO2			EL	Yes
VOC				Yes

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: CO - Carbon Monoxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: 36.9 lb/hour 161.4 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .5 LB/TON Reference: AP-42	7. Emissions Method Code: (3) CALCULATED USING EMISSION FACTOR FROM AP-42/FIRE SYSTEM.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: 0.5 CO lbs/ton of coal 0.50 (73.7 tons/hr) = 36.9 CO lbs/hr 0.50 (73.7) (8760) (1/2000) = 161.4 CO tons/hr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Source; AP-42	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H015 - Arsenic Compounds (inorganic including arsine)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:
Limited to 5 ppm as specification of used oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H027 - Cadmium Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:
Limited to 2 ppm as specification of used oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H046 - Chromium Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:
Limited to 10 ppm as specification of used oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H106 - Hydrogen chloride (Hydrochloric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H107 - Hydrogen fluoride (Hydrofluoric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H150 - Polychlorinated biphenyls (Aroclors)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:
Limited to 50 ppm as specification of used oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: HAPS - Total Hazardous Air Pollutants	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: NOX - Nitrogen Oxides	2. Total Percent Efficiency of Control:
3. Potential Emissions: 1205.8 lb/hour 5281 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .62 LB/MMBTU Reference: PERMIT	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

Facility-wide NOx cap of 6,666 tpy; During the HERT demonstration project potential emissions will be reduced by approximately 30% to 844 lb/hr.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: (OTHER) assumed by applicant for other reasons (Explain in comment field)	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .62 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 1205.78 lb/hour 5281 tons/year
5. Method of Compliance: Annual average of CEM hourly data. (40 CFR Part 75)	
6. Allowable Emissions Comment (Description of Operating Method): Phase II NOx.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PB - Lead - Total (elemental lead and lead compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 100 ppm as specification of used oil.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM - Particulate Matter - Total	2. Total Percent Efficiency of Control: 98
3. Potential Emissions: 194.5 lb/hour 1065 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .125 LB/MMBTU Reference: PERMIT	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

lb/hr = 1944.8 mmBtu/hr*0.1 lb/mmBtu = 194.5lb/hr. TPY = 1944.8 mmBtu/hr*0.125 lb/mmBtu * 8760 hrs/yr/*1 ton/2000 lb = 1065 TPY

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

Emission factor based on 0.1 lb/MMBtu, 21 hours (steady- state); 0.3 lb/MMBtu, 3 hours (soot-blowing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .1 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 194.48 lb/hour 1065 tons/year
5. Method of Compliance: Test not required if operation < 400 hours/FFY.	
6. Allowable Emissions Comment (Description of Operating Method): During normal operations while firing coal.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .3 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 583.44 lb/hour 1065 tons/year
5. Method of Compliance: Test not required if operation < 400 hours/FFY.	
6. Allowable Emissions Comment (Description of Operating Method): During the 3 hrs in any 24 hrs period allowed for boiler clearning(soot blowing) and load changing.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM10 - Particulate Matter - PM10	2. Total Percent Efficiency of Control: 98
3. Potential Emissions: 194.5 lb/hour 1065 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assumed to be the same as PM.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SO2 - Sulfur Dioxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4084.08 lb/hour 17888 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 2.1 LB/MMBTU Reference: PERMIT	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: (OTHER) assumed by applicant for other reasons (Explain in comment field)	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.1 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 4084.08 lb/hour 17888 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM or FS&A Program.See SC12.	
6. Allowable Emissions Comment (Description of Operating Method): Applicant request. 4.5 lbs/mmBtu for unit 1 and 2 combined.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: VOC - Volatile Organic Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4.7 lb/hour 20.59 tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .07 LB/TON BURNED Reference: SCC	7. Emissions Method Code: (3) CALCULATED USING EMISSION FACTOR FROM AP-42/FIRE SYSTEM.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE40 - VISIBLE EMISSIONS - 40% NORMAL OPACITY	☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: 40% Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: The Permittee elected to utilize a transmissometer (opacity meter) for demonstrating compliance with the visible emissions limit.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE60 - VISIBLE EMISSIONS - 60% NORMAL OPACITY	☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	

4. Method of Compliance:

5. Visible Emissions Comment:

During the 3-hrs in any 24 hr period allowed for boiler cleaning (soot blowing) and load change. Test not required if operation < 400 hours/FFY.

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 5

1. Parameter Code: CO2 - Carbon dioxide	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: SIEMENS Model Number: Ultramat 5E Serial Number: DO-665	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses the Siemens CO2 analyzer to measure the diluent component of the SO2 and NOX emission rate. Unit is required to monitor CO2 under 2-296.405(	
Status: Active	

Continuous Monitoring System: Continuous Monitor 2 of 5

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Spectrum Systems, In Model Number: 43H Serial Number: 43H-43678-269	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date: 01-JAN-94
7. Continuous Monitor Comment: Unit has elected to install and operate CEM for SO2 in lieu of monitoring emissions using fuel sampling and analysis under rule 62-296.405(1)(f)1. Additional requirements under 40CFR75.	
Status: Active	

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: SPECTRUM SYSTEMS Model Number: SS4542 Serial Number: 931001/931003	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date: 01-JUN-93
7. Continuous Monitor Comment:	
Status: Active	

Continuous Monitoring System: Continuous Monitor 4 of 5

1. Parameter Code: EM - EMISSION	2. Pollutant(s): NOX
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: TECO Model Number: 42D Serial Number: 42D-40365-262	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses Siemens and Teco analyzers to calculate unit NOx emission rate. CEM required under Title IV 40 CFR Part 75.	
Status: Active	

Continuous Monitoring System: Continuous Monitor 5 of 5

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: SIERRA Model Number: 650 Serial Number: SM-1A , SM-1B	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses heat input measurements from flow to calculate hourly emissions. CEM flow monitors are required under Title IV 40 CFR Part 75.	
Status: Active	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

6. Compliance Demonstration Reports/Records

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

☐ To Be Submitted, Date (if known):

Previously Submitted Test Date(s)/Pollutants Tested:

To be Submitted Test Date(s)/Pollutants Tested:

Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute

☐ Applicable ☐ Attachment

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements

☑ Applicable ☑ Attachment

2. Compliance Assurance Monitoring Plan

☐ Applicable ☐ Attachment

3. Alternative Methods of Operation

☐ Applicable ☐ Attachment

4. Alternative Modes of Operation (Emissions Trading)

☐ Applicable ☐ Attachment

5. Acid Rain Part Application

Certificate of Representation (EPA Form No. 7610-1)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

Acid Rain Part (Form No. 62-210.900(1)(a))

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))

☐ Applicable ☐ Attachment

2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)

☐ Applicable ☐ Attachment

3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)

☐ Applicable ☐ Attachment

Other Information Regarding this Emissions Unit

1. Other Emissions Unit Information

☑ Applicable ☑ Attachment

Note: Provide any other information related to the emissions unit addressed in this Emissions Unit Information Section that is not elsewhere provided in the application, not otherwise required and that you, the applicant, believe may be helpful.

Additional Requirements Comment

Attachments include information for the Unit 1 High Energy Reagent Technology (HERT) Project.

Emission Unit Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Other Emissions Unit Information	UreaMSDS.pdf	HERT-UREA MSDS Information.	Yes	06/04/2007
	Smith HERT Plan. pdf	Unit 1 SNCR-HERT Project Description.	Yes	06/07/2007
	HERT Skid.pdf	SNCR-HERT Skid Diagram.	Yes	06/04/2007
Identification of Applicable Requirements	DOCS-#262696-v2-Smith_-_Unit_001_-_FDEP.DOC	Updated Unit 1 applicable FDEP rule analysis.	Yes	06/04/2007
	DOCS-#262697-v1-Smith_-_Unit_001_-_EPA.DOC	Updated Unit 1 applicable EPA rule analysis.	Yes	06/04/2007

III. EMISSIONS UNIT INFORMATION
A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☑ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☑ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
BOILER NUMBER 2 - 2,246.2 MMBTU/HOUR (PHASE II ACID RAIN)

3. Emissions Unit Identification Number: 2

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		08-APR-67	49	☑ Yes ☐ No

9. Package Unit Model Number:
Manufacturer:

10. Generator Nameplate Rating: 205 MW

11. Emissions Unit Comment:
Units -001 and -002 share a common stack

Emissions Unit Control Equipment

Code	Equipment	Description
24	MODIFIED FURNACE/BURNER DESIGN	Low NOx burners manufactured by Foster Wheeler.
10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)	Hot Precipitator Buell Model #BAL 2X34N333-4-3P and Cold Precipitator General Electric Model #BE2.1X(2-12`S)(12)-30-111-4.3P
107	SELECTIVE NONCATALYTIC REDUCTION FOR NOX	The HERT Project is a demonstration of SNCR technology,
206	DRY SORBENT INJECTION	The MOBOTEC Project uses dry sorbent injection technology for mercury removal.

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 2246.2 million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8760 hours/year
6. Operating Capacity/Schedule Comment: Coal. 76 mmBtu/hr for #2 fuel oil and "on-spec" used oil. Compliance by fuel records.

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code: 2 - An emission point serving 2 or more EU's capable of simultaneous operation
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: • 1 - BOILER NUMBER 1 - 1,944.8 MMBTU/HOUR (PHASE II ACID RAIN)		
5. Discharge Type Code: (V) A STACK WITH AN UNOBSTRUCTED OPENING DISCHARGING IN A VERTICAL/NEARLY VERTICAL DIRECTION	6. Stack Height: 199 feet	7. Exit Diameter: 18 feet
8. Exit Temperature: 260° F	9. Actual Volumetric Flow Rate: 1567967 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates... Zone: 16 East (km): 625.2 North (km): 3349.1		14. Emission Point Latitude/ Longitude... Latitude: 30° 16' 7" N Longitude: 85° 41' 7" W
15. Emission Point Comment: Units -001 and -002 share a common stack.		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type): Boiler fired with Pulverized Bituminous Coal. Emissions related to tons burned.		
2. Source Classification Code (SCC): 10100212	3. SCC Units: Tons Bituminous Coal Burned	
4. Maximum Hourly Rate: 85.2	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 4.1	8. Maximum % Ash: 9.9	9. Million Btu per SCC Unit: 24
10. Segment Comment: Minimum MBTU per SCC unit is 23. Average MBTU is 24.		
Is this a valid segment? Yes		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type): Boiler fired with #2 fuel oil and "on spec." used oil. emissions related to thousand gallons burned.		
2. Source Classification Code (SCC): 10100501	3. SCC Units: 1000 Gallons Distillate Oil (No. 1 & 2) Burned	
4. Maximum Hourly Rate: .55	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: .5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 138
10. Segment Comment: Maximum persent ash in item 8 is 0.05 %.		
Is this a valid segment? Yes		

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10101302	3. SCC Units: 1000 Gallons Waste Oil Burned	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 132
10. Segment Comment: Used oil specification: Arsenic 5 PPM, Cadmium 2 PPM, Chromium 10 PPM, Lead 100 PPM, Total Halogens 1000 PPM, PCB50 ppm.		
Is this a valid segment? Yes		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code	Valid?
CO			NS	Yes
H015			EL	Yes
H027			EL	Yes
H046			EL	Yes
H106				Yes
H107				Yes
H150			EL	Yes
HAPS				Yes
NOX			EL	Yes
PB			EL	Yes
PM	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)		EL	Yes
PM10	ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%)		NS	Yes
SO2			EL	Yes
VOC				Yes

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: CO - Carbon Monoxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: 42.6 lb/hour 186.6 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .5 LB/TON Reference: AP-42	7. Emissions Method Code: (3) CALCULATED USING EMISSION FACTOR FROM AP-42/FIRE SYSTEM.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: 0.5 CO lbs/ton of coal 0.50 (85.2 tons/hr) = 42.6 lbs/hr 0.50 (85.2) (8760) (1/2000) = 186.6 tons/yr	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Source; AP-42	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H015 - Arsenic Compounds (inorganic including arsine)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:
Limited to 5 ppm as specification of used oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H027 - Cadmium Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:
Limited to 2 ppm as specification of used oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H046 - Chromium Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:
Limited to 10 ppm as specification of used oil.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H106 - Hydrogen chloride (Hydrochloric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H107 - Hydrogen fluoride (Hydrofluoric acid)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: H150 - Polychlorinated biphenyls (Aroclors)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:
Limited to 50 ppm as specification of used oil

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: HAPS - Total Hazardous Air Pollutants	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: NOX - Nitrogen Oxides	2. Total Percent Efficiency of Control:
3. Potential Emissions: 988.33 lb/hour 4329 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .44 LB/MMBTU Reference: PERMIT	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

Facility-wide NOx cap of 6,666 tpy; During the HERT demonstration potential NOX emissions will be reduced by approximately 30% to 692 lb/hr.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: (OTHER) assumed by applicant for other reasons (Explain in comment field)	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .44 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 988.33 lb/hour 4329 tons/year.
5. Method of Compliance: Annual Average of CEM hourly data.	
6. Allowable Emissions Comment (Description of Operating Method): Phase II NOx.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PB - Lead - Total (elemental lead and lead compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Limited to 100 ppm as specification of used oil.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM - Particulate Matter - Total	2. Total Percent Efficiency of Control: 98
3. Potential Emissions: 224.6 lb/hour 1229.8 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: .125 LB/MMBTU Reference: PERMIT	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

lb/hr = 2246.2 mmBtu/hr*0.1 lb/mmBtu = 224.6lb/hr. TPY = 2246.2 mmBtu/hr*0.125 lb/mmBtu * 8760 hrs/yr/*1 ton/2000 lb = 1229.8 TPY

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

Emission factor based on 0.1 lb/MMBtu, 21 hours (steady- state); 0.3 lb/MMBtu, 3 hours (soot-blowing).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .3 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 673.86 lb/hour 1229.8 tons/year
5. Method of Compliance: Test not required if operation < 400 hours/FFY.	
6. Allowable Emissions Comment (Description of Operating Method): During the 3 hrs in any 24 hrs period allowed for boiler clearning(soot blowing) and load changing.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: (RULE) required by rule specified in regulation	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: .1 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 224.62 lb/hour 1229.8 tons/year
5. Method of Compliance: Test not required if operation < 400 hours/FFY.	
6. Allowable Emissions Comment (Description of Operating Method): During normal operations while firing coal.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM10 - Particulate Matter - PM10	2. Total Percent Efficiency of Control: 98
3. Potential Emissions: 224.6 lb/hour 1229.8 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment: Assumed to be the same as PM.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SO2 - Sulfur Dioxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6064.74 lb/hour 26564 tons/year	4. Synthetically Limited? ☐ Yes ☑ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 2.7 LB/MMBTU Reference: PERMIT	7. Emissions Method Code: (0) EQUAL TO EQUIVALENT ALLOWABLE EMISSION/WORST-CASE ALLOWABLE EMISSION.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	

11. Pollutant Potential,Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: (OTHER) assumed by applicant for other reasons (Explain in comment field)	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.7 POUNDS PER MILLION BTU HEAT INPUT	4. Equivalent Allowable Emissions: 6064.74 lb/hour 26564 tons/year
5. Method of Compliance: Daily 24 hour average based on CEM or FS&A. See SC 12.	
6. Allowable Emissions Comment (Description of Operating Method): Applicant request. 4.5 lbs/mmBtu for unit 1 and 2 combined.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: VOC - Volatile Organic Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Pollutant Potential,Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No Pollutant Allowable Emissions information submitted.

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE40 - VISIBLE EMISSIONS - 40% NORMAL OPACITY	☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: 40% Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: The Permittee elected to utilize a transmissometer (opacity meter) for demonstrating compliance with the visible emissions limit.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE60 - VISIBLE EMISSIONS - 60% NORMAL OPACITY	☑ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	

4. Method of Compliance:

5. Visible Emissions Comment:

During the 3-hrs in any 24 hr period allowed for boiler cleaning (soot blowing) and load change. Test not required if operation < 400 hours/FFY.

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 5

1. Parameter Code: CO2 - Carbon dioxide	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: SIEMENS Model Number: Ultramat 5E Serial Number: DO-663	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses the Siemens CO2 analyzer to measure the diluent component of the SO2 and NOX emission rate. Unit is required to monitor CO2 under 2-296.405(	
Status: Active	

Continuous Monitoring System: Continuous Monitor 2 of 5

1. Parameter Code: EM - EMISSION	2. Pollutant(s): SO2
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: TECO Model Number: 43H Serial Number: 43H-41459-265	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date: 01-JAN-94
7. Continuous Monitor Comment: Unit has elected to install and operate CEM for SO2 in lieu of monitoring emissions using fuel sampling and analysis under rule 62-296.405(1)(f)1. Specific conditions from existing permit is enclosed	
Status: Active	

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: VE - Visible emissions (opacity)	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: SPECTRUM Model Number: SS-4542 Serial Number: A1 931002	
5. Installation Date: 01-NOV-93	6. Performance Specification Test Date: 01-FEB-94
7. Continuous Monitor Comment:	
Status: Active	

Continuous Monitoring System: Continuous Monitor 4 of 5

1. Parameter Code: FLOW - Volumetric flow rate	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: SIERRA Model Number: 650 Serial Number: SM-2A SM-2B	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses heat input measurements from flow to calculate hourly emissions. CEM flow monitors are required under Title IV 40 CFR Part 75.	
Status: Active	

Continuous Monitoring System: Continuous Monitor 5 of 5

1. Parameter Code: EM - EMISSION	2. Pollutant(s): NOX
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: TECO Model Number: 42D Serial Number: 42D-40402-262	
5. Installation Date: 01-DEC-93	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Spectrum Systems Model 300 Dilution Monitoring System uses Siemens and Teco analyzers to calculate unit NOx emission rate. CEM required under Title IV 40 CFR Part 75.	
Status: Active	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

6. Compliance Demonstration Reports/Records

☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

☐ To Be Submitted, Date (if known):

Previously Submitted Test Date(s)/Pollutants Tested:

To be Submitted Test Date(s)/Pollutants Tested:

Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute

☐ Applicable ☐ Attachment

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☑ Applicable ☑ Attachment

2. Compliance Assurance Monitoring Plan
   ☐ Applicable ☐ Attachment

3. Alternative Methods of Operation
   ☐ Applicable ☐ Attachment

4. Alternative Modes of Operation (Emissions Trading)
   ☐ Applicable ☐ Attachment

5. Acid Rain Part Application

   Certificate of Representation (EPA Form No. 7610-1)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

   Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

   Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

   New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

   Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

   Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

   Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Applicable ☐ Previously Submitted, Date: ☐ Attachment

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))

☐ Applicable ☐ Attachment

2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)

☐ Applicable ☐ Attachment

3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)

☐ Applicable ☐ Attachment

Other Information Regarding this Emissions Unit

1. Other Emissions Unit Information

☑ Applicable ☑ Attachment

Note: Provide any other information related to the emissions unit addressed in this Emissions Unit Information Section that is not elsewhere provided in the application, not otherwise required and that you, the applicant, believe may be helpful.

Additional Requirements Comment

Attached files include project description for the Unit 2 SNCR-HERT and Mercury Sorbent Injection (MOBOTEC)projects.

Emission Unit Attachments

Supplemental Item	Electronic File Name	Attachment Description	Electronic Document	Date Uploaded
Other Emissions Unit Information	UreaMSDS.pdf	SNCR HERT Urea MSDS Information.	Yes	06/04/2007
	SorbentMSDS.pdf	MinPlus MSDS Information.	Yes	06/05/2007
	HERT Skid.pdf	Unit 2 SNCR-HERT Skid diagram.	Yes	06/04/2007
	SmPM.pdf	Unit 2 MOBOTEC Project Emissions Calculation.	Yes	06/07/2007
	Smith MOBOTEC Plan.pdf	Unit 2 MOBOTEC Project Description.	Yes	06/07/2007
	Smith HERT Plan.pdf	Unit 2 SNCR-HERT Project Description.	Yes	06/07/2007
Identification of Applicable Requirements	DOCS-#262698-v1-Smith_-_Unit_002_-_FDEP.DOC	Updated Unit 2 applicable FDEP rule analysis.	Yes	06/04/2007
	DOCS-#262699-v1-Smith_-_Unit_002_-_EPA.DOC	Updated Unit 2 applicable EPA rule analysis.	Yes	06/04/2007