

DeVore, Christy

From: Galbraith, Bret [Bret.Galbraith@lakelandelectric.com]
Sent: Monday, May 24, 2010 3:27 PM
To: Koerner, Jeff
Cc: DeVore, Christy; Shelton, Farzie; 'Angela Morrison Uhland'; Doerr, Doug; Moore, Ronni
Subject: RE: SAM Emissions Summary
Attachments: 1050004-026-AC - Draft Revision - Jeff.rev1.docx

Jeff,
Lakeland Electric has agreed to accept FDEP's last offer with the minor comments we made in the last draft the Department sent out last week. Lakeland Electric will accept the 0.22 lb/MMBtu NOx calendar average and the fuel sulfur content limit of 1.92% before additional SAM testing is required on Unit 3. Please contact Farzie Shelton at (863) 834-8180 or myself as to how best to proceed in finalizing the permit. Thank you.

Bret Galbraith, E.I. | Environmental Permitting | Lakeland Electric
501 E. Lemon St. | Lakeland, FL 33810 | office: 863-834-8180 cell: 813-351-0149 | fax: 863-834-8187 | e-mail: bret.galbraith@lakelandelectric.com

PUBLIC RECORDS NOTICE:

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DeVore, Christy

From: Koerner, Jeff
Sent: Friday, May 28, 2010 12:48 PM
To: 'Galbraith, Bret'
Cc: DeVore, Christy
Subject: RE: Lakeland Electric permit

Condition 14 of the original permit specifically states, "Future Actual Emissions Reporting. The permittee shall maintain and submit to the Department on an annual basis for a period of 5 years from the date the SCR systems are initially operated ..."

The purpose of adding Condition 24 is to simply put Lakeland on notice that an air construction permit is needed to install air pollution control equipment. If you remove your sorbent injection system and later want to put it back in, you need an AC permit. If you decide to install a different acid mist mitigation system, you need an AC permit. That's all Rule 62-210.300(1)(a), F.A.C. says. If Lakeland shows that the project did result in SAM emissions > PSD, then that would require a PSD application and BACT determination.

24. New Control Equipment: In accordance with Rule 62-210.300(1)(a), F.A.C., if the sorbent injection system is removed, the permittee shall obtain an air construction permit to install new acid mist mitigation equipment or to reinstall the sorbent injection system if required the plant determines this is necessary to maintain SAM emissions below a 7 TPY increase above the baseline emissions, which were estimated at 136 TPY. [Rule 62-210.300(1)(a), F.A.C.]

Does this satisfy you last concern?

Jeff

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

From: Galbraith, Bret [mailto:Bret.Galbraith@lakelandelectric.com]
Sent: Friday, May 28, 2010 12:22 PM
To: Koerner, Jeff
Cc: DeVore, Christy
Subject: Lakeland Electric permit

Jeff,
Farzie has agreed to the language in the permit as long as Angela can assure the technical evaluation language concern. However, there was one issue that was brought up whether Condition 24 would apply for more than 5 years, i.e., would the baseline of 136 TPY apply in the future past five years. Angela had stated that we may want to generalize the condition more so that there is no confusion, is the suggested language below satisfactory? Can this change be made, or can you address this someway easier?

24. New Control Equipment: In accordance with Rule 62-210.300(1)(a), F.A.C., if the sorbent injection system is removed, the permittee shall obtain an air construction permit, if they elect to or are required to by law, to install new acid mist mitigation equipment or to reinstall the sorbent injection system. ~~if required to maintain SAM emissions below a 7 TPY increase above the baseline emissions, which were estimated at 136 TPY.~~

[Rule 62-210.300(1)(a), F.A.C.]

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DeVore, Christy

From: Galbraith, Bret [Bret.Galbraith@lakelandelectric.com]
Sent: Friday, May 28, 2010 8:14 AM
To: Koerner, Jeff
Cc: DeVore, Christy
Subject: Lakeland Electric SCR permit
Attachments: 1050004-026-AC - Draft Revision-3.pdf; Settlement Stipulation.pdf

Jeff,

I have read the final draft permit and stipulation and I believe everything is agreeable, however, I have one concern. There was some language which was going to be placed in the technical evaluation for the project, i.e., "there is no new heat input limit established by this permit," and "the ammonia slip condition does not set a limit for Title V fee purposes," and I wanted to know if your office could forward that document to us for review? As long as language along those lines will be in the technical evaluation this permit should be agreeable.

I am asking for this document because I believe the stipulation agreement would forbid us from commenting on any part of the permit after we sign the agreement, and I just wanted to make sure certain language was in the technical evaluation. Feel free to contact me if my interpretation is incorrect. Thank you.

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[Rule 62-210.300(1)(a), F.A.C.]

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Permit File Scanning Request from Elizabeth

Priority: -ASAP (Public Records Request, etc.) -Place in Normal Scanning Queue

Facility ID	Project#	Type	PSD #	Submittal Date	Batch #
1050064	076	Ac		SEP 30 2010	

File Approved For Disposal

Correspondence Intent Permit Draft

Return File to BAR

Amendment Application OGC Proposed

Document Date 5-28-10

DeVore, Christy

From: Koerner, Jeff
Sent: Friday, May 28, 2010 8:58 AM
To: 'Galbraith, Bret'
Cc: DeVore, Christy; Vielhauer, Trina; Moore, Ronni
Subject: RE: Lakeland Electric SCR permit

Bret,

We agree to add the following statements to our Technical evaluation and Preliminary Determination:

1. The permit does not establish any new limits on the heat input rate.
2. The Department does not collect Title V fees based on ammonia slip for units with SCR systems.

I believe you can attach this e-mail to the settlement agreement.

What do you think, Ronni?

Thanks!

Jeff Koerner, New Source Review Section
850/921-9536

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

From: Galbraith, Bret [mailto:Bret.Galbraith@lakelandelectric.com]
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Subject: Lakeland Electric SCR permit

Jeff,

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STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CITY OF LAKELAND,

Petitioner,

vs.

OGC No. 09-4240
DEP Permit No. 1050004-026-AC

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

Respondent.

SETTLEMENT STIPULATION

Petitioner City of Lakeland (Lakeland) and Respondent Department of Environmental Protection (Department) stipulate to the settlement of the above captioned case, and in support thereof, state:

1. On December 15, 2009, the Department issued its notice of intent to issue a draft air construction permit extension and revision, Permit No. 1050004-026-AC, to Lakeland for its C.D. McIntosh, Jr. Power Plant located at 3030 East Lake Parker Drive, Lakeland, Polk County, Florida (Draft Permit).
2. The Department received Lakeland's timely request for an extension of time to file a petition for formal administrative hearing on the Draft Permit on December 22, 2009. The Department granted Lakeland's request through January 21, 2010 (extension). During this extension, the Department and Lakeland began discussions on the Department's proposed revisions to the Draft Permit. Before a resolution of the proposed revisions occurred, Lakeland's extension ran. Lakeland filed and the Department granted further time extensions based on Lakeland's willingness to work with the Department on the proposed revisions to the Draft Permit. Lakeland's current time extension runs on June 1, 2010.

3. The Department and Lakeland have reached an agreement on the changes to be made to the Draft Permit and the Technical Evaluation and Preliminary Determination. Within seven (7) days of this Settlement Stipulation being signed by all parties, the Department will withdraw the Draft Permit, and will issue its intent to issue Lakeland the Revised Draft Permit (Revised Draft Permit), attached hereto and incorporated herein as Attachment A, and the revised Technical Evaluation and Preliminary Determination, attached hereto and incorporated herein as Attachment B. Lakeland withdraws its Seventh Request for Extension of Time, dated May 11, 2010, contingent upon the Department's issuance of the Revised Draft Permit.

4. Within fourteen (14) days of receipt of the Department's notice of intent to issue the Revised Draft Permit, Lakeland will publish notice of the Revised Draft Permit, in accordance with Rule 62-210.350, Florida Administrative Code, and provide the Department proof of publication within fourteen (14) days of publication.

5. Lakeland waives its right to submit written comments on the Revised Draft Permit, and its right to file a request for extension of time or petition for hearing under Chapter 120, Florida Statutes, on the Revised Draft Permit. Lakeland waives its right to seek judicial review under Section 120.68, Florida Statutes, by filing a notice of appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, if the Department's issuance of the Revised Draft Permit becomes the final permit.

6. The Revised Draft Permit will become the final permit to be issued to Lakeland, unless during the public comment period the Department receives timely written comments that result in changes to the Revised Draft Permit or a petition for hearing is filed by a person not party to this Settlement Stipulation results in litigation that causes changes to the Revised Draft

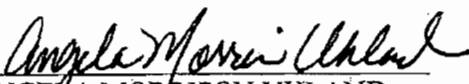
Permit. Lakeland would be a necessary party to any litigation resulting from a petition being filed by any other person regarding the issuance of the Revised Draft Permit.

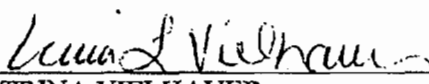
7. Each party shall be responsible for its own costs and attorney's fees and waives any right that it may have against any other party for costs and attorney's fees associated with this action.

DATED this 1st day of June, 2010.

CITY OF LAKELAND

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

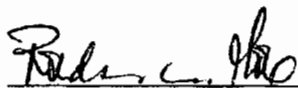

ANGELA MORRISON UHLAND
Florida Bar No. 0855766
Hopping Green & Sams, P. A.
Post Office Box 6526
Tallahassee, FL 32314
Telephone: (850) 425-2258


TRINA VIELHAUER
Chief, Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing, Settlement Stipulation, was furnished by electronic mail on this 2nd day of June, 2010, to:

Angela Morrison Umland
Hopping Green & Sams, P.A.
119 South Monroe Street
Tallahassee, FL 32314
AUhland@hgslaw.com


RONDA L. MOORE
Assistant General Counsel
3900 Commonwealth Blvd., MS 35
Tallahassee, FL 32399-3000
Ph: (850)245-2193 Fax: (850)245-2302
Florida Bar No. 0676411

DRAFT PERMIT REVISION

PERMITTEE

City of Lakeland, Dept. of Electric Utilities
Lakeland Electric
501 East Lemon Street
Lakeland, FL 33801-5050

Authorized Representative:
Mr. Tom Trickey, Plant Manager

Air Permit No. 1050004-026-AC
Permit Expires: March 31, 2011

C.D. McIntosh, Jr. Power Plant
Unit 3 SCR Project
Permit Extension and Revision

PROJECT

This is the final air construction permit, which revises original Permit No. 1050004-019-AC to: extend the permit expiration date; establish a new nitrogen oxides emissions limitation for Unit 3; and clarify the sulfuric acid mist emissions testing and reporting requirements. The project is being constructed at the existing C.D. McIntosh, Jr. Power Plant, which is located in Polk County at 3030 East Lake Parker Drive in Lakeland, Florida.

This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Permit Revisions).

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.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, 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

(DRAFT)

Joseph Kahn, Director
Division of Air Resource Management

(Date)

DRAFT PERMIT REVISION

CERTIFICATE OF SERVICE

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

- Mr. Tom Trickey, Lakeland Electric (tom.trickey@lakelandelectric.com)
- Ms. Farzie Shelton, Lakeland Electric (farzie.shelton@lakelandelectric.com)
- Mr. Bret Galbraith, Lakeland Electric (bret.galbraith@lakelandelectric.com)
- Ms. Cindy Zhang-Torres, DEP SW District (cindy.zhang-torres@dep.state.fl.us)
- Mr. Mike Halpin, DEP Siting Office (mike.halpin@dep.state.fl.us)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
- Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)
- Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)
- Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

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

(DRAFT)

(Clerk)

(Date)

SECTION 1. GENERAL INFORMATION (DRAFT)

FACILITY DESCRIPTION

The facility is an existing power plant, which is categorized under Standard Industrial Classification Code No. 4911. The UTM coordinates are Zone 17, 409.0 km East and 3106.2 km North.

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility operates units subject to the Clean Air Interstate Rule (CAIR).
- 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.

PROPOSED PROJECT

Fossil Fuel Steam Generator Unit 3 (Emissions Unit No. 006) is a nominal 360 megawatt fossil fuel-fired steam generator that burns primarily coal or blends of coal and petroleum coke (petcoke) and small amounts of refuse derived fuel (RDF). The maximum heat input rate is 3640 million British thermal units (MMBtu) per hour. The steam generator is supplied by Babcock and Wilcox. It is a balance-draft "late 1970's design" with 16 burners located on the front wall and 16 burners located on the back wall. The burners are fed by two coal pulverizers located on the front wall and two on the back wall. Particulate matter emissions are controlled by an existing electrostatic precipitator (ESP). Low-NO_x burners (LNBs) and over-fire air (OFA) systems control nitrogen oxides (NO_x) and a wet limestone scrubber reduces sulfur dioxide (SO₂) emissions. Permit No. 1050004-019-AC authorized the installation of a selective catalytic reduction (SCR) system to reduce NO_x emissions and a sorbent injection system to reduce sulfuric acid mist (SAM) emissions. 4 *am* ✓

The permit extension is needed to complete miscellaneous construction activities, conduct performance testing, review and submit test results and submit an application for a revised Title V air operation permit to incorporate the applicable requirements of the air construction permit. Clarifications to the SAM emissions testing and reporting requirements are necessary to bridge the gap between the original permit requirements, the initial test protocol and the revised letter of authorization to conduct initial SAM performance tests.

The permittee is installing the new SCR system to provide flexibility to comply with the federal Clean Air Interstate (CAIR) program. However, based on current ambient monitoring data for nearby Hillsborough County, this area is likely to be designated as nonattainment for the new federal ozone standard (75 parts per billion). To help mitigate prospective ozone problems in this area, this permit specifies a new NO_x emissions limitation based on annual average NO_x emissions after implementing the newly installed LNB and OFA equipment and the SCR system design. In accordance with Rule 62-4.080, F.A.C., the Department determines that a higher degree of treatment is necessary to improve the area's air quality, which can be achieved with the installed equipment without unreasonable hardship.

SECTION 2. PERMIT REVISIONS (DRAFT)

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with shading.

Permit Being Modified: Permit No. 1050004-019-AC

Affected Emissions Units: McIntosh Unit 3 Fossil Fuel Fired Steam Generator (EU-006)

The expiration date is hereby extended from **December 31, 2009** to **March 31, 2011**. The purpose is to provide sufficient time to complete the work and submit an application to revise the Title V air operation permit.

Section 3, Specific Conditions 12, 13, 15, 16, 17, 18 and new 24: These conditions are revised as follows.

EMISSION LIMITS AND STANDARDS

12. Ammonia Emissions (Slip). Subject to the requirements of Condition 19 in this section, the SCR system shall be designed and operated for an ammonia slip target of less than 5 ppmv based on the average of three, 1-hour test runs. Ammonia slip measured at the stack downstream of all emissions control systems, shall not exceed 5 parts per million by volume (ppmv). Annual testing of ammonia slip shall be conducted and corrective measures taken if measured values exceed 2 ppmv. [Rule 62-4.070(3), F.A.C.]

13. Emission Limits.

a. CO Emission Limit Subject to Revision: (No other change to the CO emissions limit).

b. NOx Emission Limit: NOx emissions from Unit 3 shall not exceed 0.22 lb/MMBtu of heat input based on a calendar year average of all periods of operation, including startup, shutdown and malfunction. The permittee shall begin collecting and averaging data towards a demonstration of compliance with the new NOx emissions limitation beginning January 1, 2011.

[Rules 62-4.080, 62-210.300 and 62-4.055, F.A.C.]

EMISSIONS PERFORMANCE TESTING

15. Initial SAM Performance Tests and Sorbent Injection for SAM Emissions Control. Within 90 days of completing construction of the SCR system, the permittee shall conduct a series of initial performance tests to determine the SAM emissions rate under a variety of operating scenarios that documents the impact of sorbent injection on reducing SAM emissions and results in the development of correlation/curves between injection rates, operating conditions and emissions.

~~At permitted capacity and with no SCR bypass, the permittee shall conduct stack tests to determine the uncontrolled sulfuric acid mist emission rate, the controlled sulfuric acid mist emission rate, and actual control efficiency of the installed sorbent injection system. Tests shall consist of three, 1-hour test runs and be conducted while firing the fuel blend with the highest sulfur content that will be fired in the unit. During each test run, the permittee shall continuously monitor and record the sorbent injection rate and total secondary power input to the electrostatic precipitator. The purpose of these tests is to determine actual control efficiency of the installed systems and to establish the correlation between SAM emissions and the a minimum sorbent injection rate, which will be used to calculate the actual annual emissions.~~

a. Within 90 days of first injecting ammonia to the SCR system, the permittee shall conduct the following initial tests:

1) The permittee shall conduct at least two, 1-hour test runs at each of the following operating scenarios to determine SAM emissions.

<u>Scenario</u>	<u>Load</u>	<u>Sorbent Injection</u>
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SECTION 2. PERMIT REVISIONS (DRAFT)

<u>Scenario</u>	<u>Load</u>	<u>Sorbent Injection</u>
1A	100% load	Off
1B	100% load	ON
2A	88% load	Off
2B	88% load	ON
3A	69% load	Off
3B	69% load	ON

The operator shall use best efforts to obtain and maintain the approximate target unit load throughout the test run for each operating scenario.

- 2) All test runs shall be conducted while injecting ammonia for the control of nitrogen oxides (NO_x).
 - 3) The sorbent injection rate used for each operating scenario shall be determined by the equipment vendor.
 - 4) For each SAM test run the operator shall:
 - a) Record the ammonia injection rate;
 - b) Record the sorbent injection rate;
 - c) Determine the fuel firing rate and heat input rate;
 - d) Use the stack CEMS to determine controlled NO_x and SO₂ emissions; and
 - e) Attempt to sample uncontrolled SO₂ emissions before the flue gas desulfurization system. If unable to gather meaningful uncontrolled SO₂ data for these initial tests, the permittee shall determine the uncontrolled SO₂ emissions by actual fuel flow and sulfur content.
 - 5) Appropriate reference test methods shall be used to determine SAM and SO₂ emissions as necessary for the given operating conditions;
 - 6) At a minimum, the permittee shall submit a test report within 45 days of completing the initial performance tests to include the following information for each SAM test run: the load; the heat input rate; the test method with any variations noted; the fuel blend fired and the average sulfur content; the actual sorbent injection rate; the controlled SO₂ emissions rate as determined by the CEMS; the uncontrolled SO₂ emissions rate as determined by stack test (if not available, then as determined by fuel flow and sulfur content); the ammonia injection rate for NO_x control by the SCR; the controlled NO_x emissions rate as determined by CEMS; the stack opacity as determined by the continuous opacity monitoring system (COMS). The report shall discuss the relative influence of operating parameters and how the sorbent injection rate will be adjusted for differing operating scenarios.
 - 7) Until the test results are known, the permittee shall continue to operate the sorbent injection system based on the sorbent injection rate recommended by the equipment vendor. Once the test results are known, the permittee may begin to operate the sorbent injection system based on the performance indicated by the data collected during the initial tests such that SAM emissions increases from the project will be less than 7 tons/year. The permittee shall identify and monitor the operating conditions that would result in an adjustment of the sorbent injection rate.
- b. Within 60 days of conducting this the initial round of performance tests, the permittee shall propose a new schedule and revised test protocol for conducting the originally proposed tests including the determination

SECTION 2. PERMIT REVISIONS (DRAFT)

of the SAM conversion rate across the SCR catalyst. Within 120 days of submitting the test report for the initial tests, the permittee shall conduct the following additional tests:

- a-1) For each set of operating conditions being evaluated, the permittee shall conduct at least a 1-hour test run to determine SAM emissions. At least nine such test runs shall be conducted to evaluate the effect on SAM emissions from such parameters as the SO₂ emission rate prior to the SCR catalyst (and FGD system), the unit load, the flue gas flow rate, the sorbent injection rate and the current catalyst oxidation rate.
- b-2) Tests shall be conducted under a variety of fuel blends and load rates that are representative of the actual operating conditions. Sufficient tests shall be conducted to establish the SAM emissions rates for the following scenarios: ~~bypass of the SCR reactor~~, SCR reactor in service (ammonia injection) without sorbent injection, and SCR reactor in service (ammonia injection) under varying operating conditions and levels of sorbent injection.
- e-3) At least 15 days prior to initiating the performance tests, the permittee shall submit a test notification, preliminary test schedule and test protocol to the Bureau of Air Regulation and the Compliance Authority.
- d-4) Within 45 days following the last test run conducted, the permittee shall provide a report summarizing the emissions tests and results. All SAM emissions test data shall be provided with this report.
- e-5) Within 45 days following the submittal of the emissions test report and no later than 90 days following the last test run conducted, the permittee shall submit a project report summarizing the following:
 - a) Identify each set of operating conditions evaluated;
 - b) ~~Identify~~ Identify each operating parameter evaluated;
 - c) Identify the relative influence of each operating parameter, describe how the automated control system will adjust the sorbent injection rate based on the selected parameters;
 - d) Identify the frequency with which operational parameters will be reevaluated and adjusted within the automated control system;
 - e) Provide the algorithm used for the automated control system or a series of related performance curves; and
 - f) Provide details for calculating and estimating the SAM emissions rate based on the level of sorbent injection and operating conditions. The test results shall be used to adjust the sorbent injection control system and estimate SAM emissions.

c. Within 45 days of firing a fuel blend with a sulfur content that is 0.20% sulfur by weight (based on a 14-operational day rolling average) higher than the maximum sulfur content previously tested, the permittee shall conduct the following additional SAM performance tests,

- 1) Conduct the SAM performance tests in accordance with the requirements of paragraph "b" of this condition, or
- 2) If the sorbent injection system is removed or is determined to be unnecessary for a given coal blend, conduct at least three, 1-hour test runs at permitted capacity to determine the SAM emissions rate,

The permittee shall use the data collected to calculate the actual SAM emissions when operating under the given conditions, including the period of time from first fire of the fuel blend until the performance test results are known.

[Rules 62-4.070(3) and 62-212.300(1)(e), F.A.C.]

SECTION 2. PERMIT REVISIONS (DRAFT)

16. Determining Actual SAM Emissions Sorbent Injection for SAM Emissions Control. On an annual basis, the permittee must demonstrate that SAM emissions increases as a result of this project are less than 7 TPY. The permittee shall ~~install and~~ operate the sorbent injection system at a frequency and injection rate for SAM control to satisfy this requirement. An automated control system will be used to adjust the sorbent flow rate ~~adjusted~~ for the given set of operating conditions based on the most recent performance test results. Actual SAM emissions shall be calculated using the information available for the given operating conditions (e.g., the sulfur content of fuel blend, the SO₂ emission rate prior to the SCR catalyst, the unit load, the flue gas flow rate, the sorbent injection rate and the current catalyst oxidation rate). If performance testing shows that it is unnecessary to operate the sorbent injection system for a given coal blend or the sorbent injection system is removed, the permittee shall determine actual SAM emissions based on emissions factors developed through the performance tests.

[Rules 62-4.070(3) and 62-212.300(1)e, F.A.C.]

17. Performance Tests. ~~Within 60 days of commencing operation~~ After completing shakedown of the SCR/~~sorbent injection~~ system, ~~but no later than 180 days after first injecting ammonia in the SCR reactor and after completing the performance tests required by Specific Condition 15,~~ the permittee shall have the following tests conducted for the unit. At permitted capacity, the permittee shall conduct tests to determine the uncontrolled NO_x emissions rate, the controlled NO_x emission rate, and the actual control efficiency of the installed SCR system. Tests shall consist of at least three, 1-hour test runs. Alternatively, the permittee may provide representative CEMS data for this demonstration. During each test run, the permittee shall continuously monitor and record the ammonia injection rate.

[Rule 62-297.310(7)(a)1, F.A.C.]

18. Ammonia Slip Tests: ~~Initial and annual c~~Compliance with the ammonia (NH₃) slip limit shall be determined using EPA conditional test method (CTM-027), EPA method 320, or other methods approved by the Department. The initial test shall be completed within 180 days after first injecting ammonia in the SCR reactor, if the tested ammonia slip rate exceeds 5 ppmv during the test, the permittee shall:

- (a) Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
- (b) Before the ammonia slip exceeds 7 ppmv, take corrective actions that result in lowering the ammonia slip to less than 5 ppmv; and
- (c) Test and demonstrate that the ammonia slip is less than 5 ppmv within 30 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is less than 5 ppmv, testing and reporting shall resume on an annual basis.

[Rule 62-4.070(3), F.A.C.]

Add the following new condition:

24. New Control Equipment: In accordance with Rule 62-210.300(1)(a), F.A.C., if the sorbent injection system is removed, the permittee shall obtain an air construction permit to install new acid mist mitigation equipment or to reinstall the sorbent injection system if required to maintain SAM emissions below a 7 TPY increase above the baseline emissions, which were estimated at 136 TPY. [Rule 62-210.300(1)(a), F.A.C.]



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

City of Lakeland, Department of Electric Utilities
501 East Lemon Street
Lakeland, FL 33801-5050

C.D. McIntosh, Jr. Power Plant
Facility ID No. 1050004

PROJECT

Project No. 1050004-026-AC
Revision of Permit No. 1050004-019-AC
Application for Minor Source Air Construction Permit
Fossil Fuel Steam Generator Unit 3
Emissions Unit ID No. 6

COUNTY

Polk County, Florida

PERMITTING AUTHORITY

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

May 28, 2010

Attachment B

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

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

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

Facility Description and Location

C.D. McIntosh, Jr. Power Plant is an existing electric power plant, which is categorized under Standard Industrial Classification Code No. 4911. The existing C.D. McIntosh, Jr. Power Plant is located in Polk County at 501 East Lemon Street in Lakeland, Florida. The UTM coordinates of the existing facility are Zone 17, 409.0 km East, and 3106.2 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility operates units subject to the Clean Air Interstate Rule (CAIR).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

Fossil Fuel Steam Generator Unit 3 (Emissions Unit No. 006) is a nominal 360 megawatt fossil fuel-fired steam generator that burns primarily coal or blends of coal and petroleum coke (petcoke) and small amounts of refuse derived fuel (RDF). The maximum heat input rate is 3640 million British thermal units (MMBtu) per hour. The Draft Permit does not establish any new limits on the heat input rate. The steam generator is supplied by Babcock and Wilcox. It is a balance-draft "late 1970's design" with 16 burners located on the front wall and 16 burners located on the back wall. The burners are fed by two coal pulverizers located on the front wall and two on the back wall. Particulate matter emissions are controlled by an existing electrostatic precipitator (ESP). Low-NO_x burners (LNBs) and over-fire air (OFA) systems control nitrogen oxides (NO_x) and a wet limestone scrubber reduces sulfur dioxide (SO₂) emissions. Permit No. 1050004-019-AC authorized the installation of a selective catalytic reduction (SCR) system to reduce NO_x emissions and a sorbent injection system to reduce sulfuric acid mist (SAM) emissions.

On September 28, 2009, the Department received a request to extend the permit expiration date of Permit No. 1050004-019-AC from December 31, 2009 to December 31, 2010. The additional time is needed to complete miscellaneous construction activities, conduct performance testing, review and submit test results and submit an

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

application for a revised Title V air operation permit to incorporate the applicable requirements of the air construction permit.

2. PSD APPLICABILITY

General PSD Applicability

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

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

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_x); sulfur dioxide (SO₂); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM₁₀); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H₂S); total reduced sulfur (TRS), including H₂S; reduced sulfur compounds, including H₂S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO₂ and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 μg/m³, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

This project to revise Permit No. 1050004-019-AC will not increase emissions and is not subject to PSD

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

preconstruction review requirements.

3. DEPARTMENT REVIEW – PERMIT EXTENSION

Contingent on the conditions specified in the draft permit revision, the Department approves the applicant’s request and will extend the permit expiration date from December 31, 2009 to March 31, 2011.

4. DEPARTMENT REVIEW – PERMIT REVISIONS

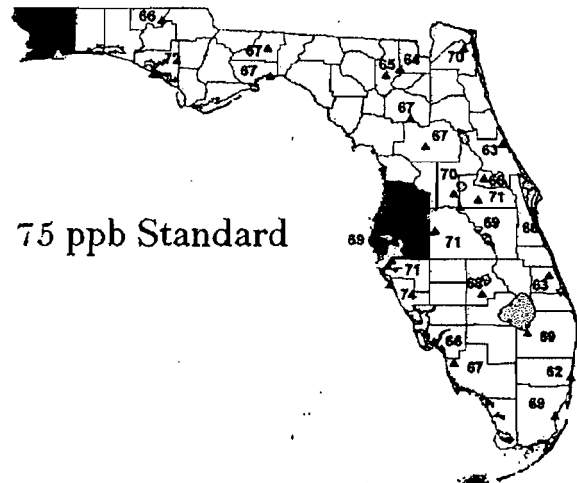
New National Ambient Air Quality Standard for Ozone

On March 12, 2008, the U.S. Environmental Protection Agency (EPA) promulgated a new National Ambient Air Quality Standard (NAAQS) for the pollutant ozone, the principle component of smog. Both the primary (protective of health) and secondary (protective of public welfare) standards were set as 0.075 parts per million (ppm), which is equivalent to 75 parts per billion (ppb). The averaging period for both standards is eight hours. Compliance with the standards is based on the three-year average of the 4th highest daily eight-hour average concentrations during each year.

Current data (2007-2009) shows two areas of the state with ozone averages values greater than 75 ppb. The Census Bureau has established the Core Based Statistical Areas (CBSA) that will likely be used to identify the geographic boundaries of any new nonattainment areas. EPA has not yet declared any nonattainment areas. If any monitor within a CBSA has a design value greater than the standard, then the entire CBSA will likely be considered nonattainment.

The following map shows current ozone design values at existing monitoring stations throughout Florida. The design values represent the three-year average of the 4th highest daily values. The following table shows the ozone values at the E.G. Simmons Park ozone monitor, which represents the highest values recorded in the Tampa-St. Petersburg-Clearwater area. The three-year average of the 4th highest values is 79 ppb, which is greater than the 2008 NAAQS.

E.G. Simmons Park Ozone Monitor				
Order	3-Year Average	Ordered Concentrations		
		07-09	2007	2008
1 st	87	87	100	76
2 nd	83	85	90	76
3 rd	81	84	83	76
4 th	79	83	82	73
5 th	77	80	82	71



On September 16, 2009, EPA announced it will likely reconsider the new NAAQS for ozone and propose a revised standard in December of 2009, which would be less than the 2008 standards.

Rule 62-4.080, F.A.C. - Modification of Permit Conditions

- (1) For good cause 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

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time.

For the purpose of this section, good cause shall include, but not be limited to, **any of the following**:

- (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
 - (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
 - (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
 - (d) For discharges into State waters, a showing that new or changed classification of the water requires a modification of the discharge.
 - (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with paragraph 62-4.050(4)(l), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

Details of the New SCR NO_x Control System

The applicant chose to install an SCR system to control NO_x emissions and provide flexibility in complying with the federal CAIR program. The following summarizes the equipment specifications for the SCR system currently being installed.

- Baseline NO_x Loading: 0.30 to 0.36 lb/MMBtu (with new LNB and OFA systems);
- Target NO_x Emissions: 0.10 lb/MMBtu (annual average);
- Estimated control Efficiency: 67% to 72% reduction;
- Ammonia (NH₃) Slip: 2 parts per million by volume dry (ppmvd) at 4% oxygen;
- Catalyst Type: high dust;
- Catalyst Configuration: vertical;
- Number of Reactors: 2;
- Number of Initial Catalyst Layers (Per Reactor): 3;
- Number of Spare Layers (Per Reactor): 1;
- Modules Per Layer (per Reactor): 9 x 5;
- Reactor Dimensions (Inside x Inside): 34'-3" x 30'-3";
- Full Load Gas Flow: 1,730,060 actual cubic feet per meter (acfm) at SCR inlet;
- Normal Operating Temperature: 640° F;

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- Superficial Velocity Through Catalyst: 15 to 16 feet per second;
- Pressure Drop Through Box and Ductwork: 10.0 inches water;
- NH₃ Consumption at Design Conditions: 415 lb/hour); and
- NH₃ Storage Required: 2 x 30,000 gallons = ~ 2 x 75 tons at 60° F.

The Department authorized this project as proposed by the applicant in Permit No. 1050004-019-AC and installation is almost complete.

Department's Proposed New NO_x Standard

Based on current ambient monitoring data for nearby Hillsborough County, this area is likely to be designated as nonattainment for the new federal ozone standard, 75 parts per billion (ppb). As previously mentioned, Rule 62-4.080, F.A.C. states, "For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions." For this project, good cause includes:

Good Cause: A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.

Rationale: The permittee chose to install the SCR system to provide flexibility in complying with the federal CAIR program. The Department fully expects the plant to operate the SCR system to generate NO_x allowances for use at the plant or for sale. The applicant's chosen technology is almost completely installed and it is reasonable for the Department to require its operation to reduce NO_x emissions which is a precursor to ozone. Since the applicant spent approximately between \$50 and 80 million (based on the application) on its chosen controls, it is not an unreasonable hardship to require its use.

Good Cause: A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S. For reference, the original numbering of each statute is maintained.

Rationale: The following provides several examples of the intent and purpose of Chapter 403, F.S.

403.011, F.S. Short Title. This act shall be known and cited as the "Florida Air and Water Pollution Control Act."

403.021, F.S. - Legislative Declaration; Public Policy.

- (3) It is declared to be the public policy of this state and the purpose of this act to achieve and maintain such levels of air quality as will protect human health and safety and, to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state, and facilitate the enjoyment of the natural attractions of this state. In accordance with the public policy established herein, the Legislature further declares that the citizens of this state should be afforded reasonable protection from the dangers inherent in the release of toxic or otherwise hazardous vapors, gases, or highly volatile liquids into the environment.
- (5) It is hereby declared that the prevention, abatement, and control of the pollution of the air and waters of this state are affected with a public interest, and the provisions of this act are enacted in the exercise of the police powers of this state for the purpose of protecting the health, peace, safety, and general welfare of the people of this state.
- (6) The Legislature finds and declares that control, regulation, and abatement of the activities which are causing or may cause pollution of the air or water resources in the state and which are or may be detrimental to human, animal, aquatic, or plant life, or to property, or unreasonably interfere with the comfortable enjoyment of life or property be increased to ensure conservation of natural resources; to ensure a continued safe environment; to ensure purity of air and water; to ensure domestic water supplies; to ensure protection and preservation of the public health, safety, welfare, and economic well-being; to ensure and provide for recreational and wildlife needs as the population increases and the economy expands; and to ensure a continuing growth of the economy and industrial development.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

403.061, F.S. - Department; Powers and Duties. The department shall have the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it and, for this purpose, to:

- (8) Issue such orders as are necessary to effectuate the control of air and water pollution and enforce the same by all appropriate administrative and judicial proceedings.
- (9) Adopt a comprehensive program for the prevention, control, and abatement of pollution of the air and waters of the state, and from time to time review and modify such program as necessary.
- (35) Exercise the duties, powers, and responsibilities required of the state under the federal Clean Air Act, 42 U.S.C. ss. 7401 et seq. The department shall implement the programs required under that act in conjunction with its other powers and duties. Nothing in this subsection shall be construed to repeal or supersede any of the department's existing rules.

Therefore, in accordance with Rule 62-4.080, F.A.C., the Department determines that a higher degree of treatment is necessary to improve the area's ozone air quality, which can be achieved with the equipment authorized by original permit No. 1050004-019-AC without unreasonable hardship. To help mitigate prospective ozone problems in this area, the Department will establish a new NO_x limit in this permit pursuant to Rule 62-4.080, F.A.C. based on the following:

- The most stringent current NO_x emission limitation is 0.50 lb NO_x/MMBtu (early Acid Rain compliance).
- Based on CEMS data reported in the Annual Operating Reports, annual average NO_x emissions after implementing the newly installed LNB and OFA equipment were 0.38 lb/MMBtu in 2007 and 0.030 lb/MMBtu in 2008.
- The design of the new SCR system included a target annual NO_x emissions rate of 0.10 lb/MMBtu and an estimated actual control efficiency of 67% to 72% reduction.

Existing data shows that the LNB and OFA systems are capable of achieving 0.30 lb/MMBtu as designed and prior to control by the SCR system. The SCR system is designed for a target NO_x emissions level of 0.10 lb/MMBtu, which is a 67% reduction. To ensure that the SCR system is operated (ammonia injected), the Department will establish the following new NO_x limitation:

NO_x ≤ 0.22 lb/MMBtu of heat input based on a calendar year CEMS average of all periods of operation, including startup, shutdown and malfunction. The permittee shall begin collecting and averaging data towards a demonstration of compliance with the new NO_x emissions limitation January 1, 2011.

This proposed NO_x standard represents a 27% reduction by the new SCR system over the current actual emissions (with LNB and OFA systems in place). In addition, SCR controls with ammonia injection will also have a co-benefit in controlling and reducing mercury emissions.

Ammonia Slip

The applicant requested the following changes to the ammonia slip requirement.

12. Ammonia Emissions (Slip). Subject to the requirements of Condition 19 in this section, the SCR system shall be designed and operated for an ammonia slip target of less than 5 ppmv based on the average of three, 1-hour test runs. Ammonia slip measured at the stack downstream of all emissions control systems, shall not exceed 5 parts per million by volume (ppmv). Annual testing of ammonia slip shall be conducted and corrective measures taken if measured values exceed 2 ppmv. [Rule 62-4.070(3), F.A.C.]

As shown in the Draft Permit, the Department revised the condition as requested. In addition, the Department does not collect Title V fees based on ammonia slip for units with SCR systems.

SAM Emissions Performance Testing

Original Permit No. 1050004-019-AC authorized the installation of SCR and sorbent injection systems on

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

existing Unit 3 (EU-006). The SCR catalyst will convert additional sulfur compounds to SAM. Use of the new sorbent injection system is intended to mitigate and maintain SAM emissions below the PSD significant emissions rate (7 tons/year). Condition No. 15 in Section 3 of this permit requires initial performance tests to determine the amount of SAM control provided by the sorbent injection system under various operating scenarios. It requires the series of initial tests to be completed within 90 days of completing construction of the SCR system.

On November 4th, the Department received a request to delay some of the SAM emissions performance testing. As required by permit, the plant provided a test protocol in September detailing the series of tests that would be conducted to satisfy the requirements of Condition No. 15. The original test protocol identified nine individual locations for testing: a single location at the stack; and (because of split duct work) dual points before/after the SCR and before/after the electrostatic precipitator (ESP). Preliminary sampling indicated widely varying and inconsistent data. It is possible that the difficulties are due to heavy fly ash loading at some of the sampling points and/or erratic cyclonic flows caused by the arrangement of equipment and flow obstructions. The plant did not believe that this data would be useful in determining appropriate performance levels for the sorbent injection system. On November 6, 2009, the Department issued a letter authorizing an initial set of performance tests to be followed by subsequent testing, which would be clarified in Project No. 1050004-026-AC to extend the expiration date of original Permit No. 1050004-019-AC.

On November 6th, the Department received a request to revise the letter of authorization regarding initial SAM performance testing, which required sets of testing at four load conditions (65%, 75%, 85% and 95%). The primary concern was that the vendor of the sorbent injection system did not recommend injecting sorbent until the unit was at 69% or more. The vendor also provided recommended sorbent injection rates for three operating loads: 69%, 88% and 100%. On November 6, 2009, the Department revised the letter of authorization to reflect the vendor information.

As shown in the Draft Permit, the Department revised and clarified the testing and reporting requirements in this permit extension for Condition Nos. 12, 13, 15, 16, 17 and 18.

Based on initial SAM performance tests, the sorbent injection system may not be needed for some load and fuel sulfur operating conditions. Depending on future needs, the plant may choose to remove the control system. The Department added Condition No. 24 to notify the plant that an air construction permit is needed to install or re-install an air pollution control system.

5. 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. Christy DeVore 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.

DeVore, Christy

From: Vielhauer, Trina
Sent: Wednesday, June 02, 2010 8:15 AM
To: DeVore, Christy; Moore, Ronni; Koerner, Jeff
Subject: RE: City of Lakeland v. DEP - settlement

I'm fine having it say what the TV says. But then we're done, right?! ☺

From: DeVore, Christy
Sent: Wednesday, June 02, 2010 7:50 AM
To: Moore, Ronni; Koerner, Jeff
Cc: Vielhauer, Trina
Subject: RE: City of Lakeland v. DEP - settlement

That's fine with me. I will change it.

*Christy DeVore, P.E.
Bureau of Air Regulation
New Source Review
Telephone (850) 921-8968*


From: Moore, Ronni
Sent: Tuesday, June 01, 2010 4:24 PM
To: Koerner, Jeff; DeVore, Christy
Cc: Vielhauer, Trina
Subject: FW: City of Lakeland v. DEP - settlement

Christy,

After speaking with you I called Angela and explained the "nominal 360" was essentially the same as stating 364. In the meantime, Angela pulled the Title V permit and on page 24 of that permit (also attached) it does state as she has indicated below. Just wanted to let you guys know. We wouldn't have any problem with having this draft permit reflect the same language as the Title V, correct?

Thanks,
Ronni

Ronda L. Moore
Assistant General Counsel

 Please consider the environment before printing this email.

Florida's Water - Ours to Protect: Check out the latest information on Florida Water Issues at <http://www.protectingourwater.org/> presented by the Florida Department of Environmental Protection.

From: Angela Morrison Uhland [mailto:AUhland@hgslaw.com]
Sent: Tuesday, June 01, 2010 4:20 PM
To: Moore, Ronni
Subject: RE: City of Lakeland v. DEP - settlement

Ronni—Thanks for your call earlier. I have sent a message and left a voice mail message for Bret Galbraith at the City of Lakeland. I'll let you know what I hear back from him. In the meantime, I pulled the current Title V permit for the Lakeland McIntosh Unit No. 3 – and here is the language already included on page 23 of the permit – I think Lakeland was just wanting to be consistent in the construction permit and not send any message that there was a derate of the unit associated with the construction permit (copy of the Title V permit attached):

McIntosh Unit 3 is a nominal 364 megawatt (electric) dry bottom wall-fired fossil fuel fired steam generator. The unit is fired on coal, residual oil, natural gas and co-fires refuse derived fuel (RDF) and petroleum coke. The maximum heat input rate is 3,640 million Btu per hour.

Thanks again for your help with this.
Kind regards,
Angela


Angela Morrison Uhland

Hopping Green & Sams, P.A. | Attorneys and Counselors | P.O. Box 6526 | 119 South Monroe Street, Suite 300 | Tallahassee, FL 32314(01) | www.hgslaw.com | 850.425.2258 | 850.521.2758 (fax) | auhland@hgslaw.com | Legal Assistant: Caroline Conway | carolinec@hgslaw.com Notice: The information contained in this e-mail message and/or its attachment(s) may be an attorney-client matter and may include privileged and confidential information. If you are not the intended recipient, please delete this message and any attachments. Thank you.

From: Moore, Ronni [mailto:Ronni.Moore@dep.state.fl.us]
Sent: Tuesday, June 01, 2010 3:42 PM
To: Angela Morrison Uhland
Subject: RE: City of Lakeland v. DEP - settlement

Angela, no problem. I hope to have an answer for you soon.

Ronda L. Moore
Assistant General Counsel

 Please consider the environment before printing this email.

Florida's Water - Ours to Protect: Check out the latest information on Florida Water Issues at <http://www.protectingourwater.org/> presented by the Florida Department of Environmental Protection.

From: Angela Morrison Uhland [mailto:AUhland@hgslaw.com]
Sent: Tuesday, June 01, 2010 3:35 PM
To: Moore, Ronni
Subject: RE: City of Lakeland v. DEP - settlement

Ronni, Thank you. I have forwarded the document to the City of Lakeland. When they were going back over everything carefully, they noted that the nominal megawatt output of the unit had been kept at 360 instead of the more accurate number of 364. This is noted in both the permit on page 3 and in the Technical Evaluation on page 2. They have left messages for Jeff and Christy but we haven't heard back. I thought if the 364 number is acceptable to the Department, I could just mark through the zero and hand-write in a 4 and initial it. I just wanted to let you know about this. Do you know if Jeff is in this afternoon? I apologize for having this issue come up at the 11th hour – but it was an earlier comment and we thought DEP had agreed but it has not been in any of the drafts from the Department, only in drafts sent to the Department. It may be that "nominal" indicates a round number and 360 is essentially the same as 364 – but we didn't have anything back from the Department indicating a formal position. Thanks for your continued patience. Kind regards,
Angela

Angela Morrison Uhland

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Assistant: Caroline Conway | carolinec@hgslaw.com Notice: The information contained in this e-mail message and/or its attachment(s) may be an attorney-client matter and may include privileged and confidential information. If you are not the intended recipient, please delete this message and any attachments. Thank you.

From: Moore, Ronni [mailto:Ronni.Moore@dep.state.fl.us]
Sent: Tuesday, June 01, 2010 2:21 PM
To: Angela Morrison Uhland
Subject: City of Lakeland v. DEP - settlement

Angela,

As discussed, please find attached the Settlement Stipulation between the City of Lakeland and the Department for your signature. Should you have any questions, please let me know.

Thanks,
Ronni

Ronda L. Moore
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Florida's Water - Ours to Protect: Check out the latest information on Florida Water Issues at <http://www.protectingourwater.org/> presented by the Florida Department of Environmental Protection.

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