## Final Determination

United States Sugar Corporation Clewiston, Florida Hendry County

Boiler No. 4 Modification Permit No. AC 26-126965

DSD.FL-100?

Florida Department of Environmental Regulation Bureau of Air Quality Management Central Air Permitting

### Final Determination

The Technical Evaluation and Preliminary Determination for the proposed modification to U.S. Sugar Corp.'s No. 4 boiler was distributed on January 16, 1987. Copies of the evaluation were available for public inspection at the Municipal Library in Belle Glade and the department's offices in Ft. Myers and Tallahassee. The Notice of Proposed Agency Action on the permit application was published in The Palm Beach Post on January 23, 1987.

Mr. Peter Cunningham, attorney for the permittee, met with the bureau to discuss several issues his client was concerned with. All issues were resolved, in principal, as confirmed in Mr. Cunningham's February 4, 1987 letter. In response to these comments, the draft permit was revised as follows.

- 1. The description of the modification was reworded.
- 2. Specific Condition No. 8 was revised to relax the quantity of special records of scrubber parameters required by the permit and to clarify over what time period the data was to be collected.
- 3. The statement in the Technical Evaluation on the department's agreement to reevaluate the sulfur dioxide standard for bagasse without penalty to the permittee was incorporated in Specific Condition No. 12.
- 4. Specific Condition No. 16 was reworded to clarify the operating condition of the boiler during the compliance tests.

The final action of the department will be to issue the permit with the changes listed above.

attachment: February 4, 1987 letter

# HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

SUITE 420, FIRST FLORIDA BANK BUILDING
POST OFFICE BOX 6526
TALLAHASSEE, FLORIDA 32314
(904) 222-7500

CARLOS ALVAREZ
BRIAN H. BIBEAU
ELIZABETH C. BOWMAN
WILLIAM L. BOYD, IV
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
WILLIAM H. GREEN
WADE L HOPPING
FRANK E. MATTHEWS
RICHARD D. MELSON
WILLIAM D. PRESTON
CAROLYN S. RAEPPLE
GARY P. SAMS
ROBERT P. SMITH, JR.

February 4, 1987

JAMES S ALVES
KATHLEEN BLIZZARD
ANNE W. CLAUSSEN
C. TIMOTHY GRAY
ELEANOR M. HUNTER
CHERYL G. STUART

OF COUNSEL W. ROBERT FOKES

DER

FEB 4 1937

BAOM

Clair Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
.2600 Blair Stone Road
Tallahassee, Florida 32301

Re: U. S. Sugar Corporation Clewiston Mill Boiler No. 4 Permit No. AC 26-126965

Dear Clair:

I am writing on behalf of U. S. Sugar Corporation in regard to the above-referenced permit as proposed by the Department in its Intent to Issue dated January 16, 1987 and accompanying Technical Evaluation and Preliminary Determination. U. S. Sugar has reviewed the proposed permit for its Clewiston Boiler No. 4, and believes there are several provisions that require revision or merit clarification in the final permit. As you know, I have discussed these items Mr. Willard Hanks of the Central Air Permitting Section, and I believe we were able to reach agreement on virtually all of the provisions of concern to U. S. Sugar. By this letter I am confirming the matters discussed with Mr. Hanks, and memorializing the agreements we reached on changes to the permit language.

# Page 1

The description of the increased production capacity for Boiler No. 4 appearing on the first page of the proposed permit could be misleading, as it refers to only one of the two steam temperature and pressure conditions under which the boiler may operate. Mr. Hanks suggested deleting the specific language dealing with the heat input and steam figures rather than adding a complete description of all of

Clair Fancy, P.E. February 4, 1987 Page 2

the permitted steam conditions. U. S. Sugar finds this an acceptable approach, as Specific Condition 1 of the proposed permit clearly delineates the permitted heat input and steam production capacities under both steam conditions. Accordingly, the first sentence of the second paragraph on page one of the proposed permit would be revised to read as follows:

Authorization to increase the heat input and steam production of the Foster wheeler boiler No. 4 at U. S. Sugar Corporation's existing sugar mill that is located near the intersection of W. C. Owens Avenue and Clewiston Street in Clewiston, Hendry County, Florida.

# Specific Condition 8

The third sentence of this specific condition would require observation and logging of scrubber gas pressure drop "during the first season of operation at the higher steam production rate". As Mr. Hanks and I discussed, the reference to "the first season of operation" is somewhat ambiguous because of the likelihood that the final permit will be issued in the midst of the current season. Mr. Hanks suggested that the intent was to obtain the scrubber data for one season of operation following issuance of the permit authorizing a higher capacity for Boiler No. 4. Since boiler operation is limited to 160 days per crop season under the proposed permit, Mr. Hanks and I agreed that the language of the sentence in question might be changed to read as follows:

During the first 160 days of operation following issuance of this construction permit, hourly readings of the gas pressure drop shall be taken and logged for each day that boiler No. 4 operates.

Similarly, the first sentence of the second paragraph of Specific Condition 8 would be revised by adding "following issuance of this construction permit" at the end of the sentence. Also, the fourth paragraph of Specific Condition 8 would be revised in the same manner as follows:

Records and measurements required by this condition shall be obtained for the first 160 days of operation of Boiler No. 4 after issuance of this

Clair Fancy, P.E. February 4, 1987
Page 3

construction permit and copies of the records transmitted to the South Florida District and Bureau of Air Quality Management at the end of the season(s).

Following my discussion with Mr. Hanks, I talked with Peter Barquin of U. S. Sugar about this permit provision. Mr. Barquin is presently compiling information on Boiler No. 4 scrubber parameters logged during last season, and he indicated that the very considerable volume of data and paper involved makes the task extremely burdensome. In view of this, I would request that the Department consider reducing the time period during which the scrubber parameters must be observed and logged to 30 days after issuance of the final permit. This would hopefully allow completion of the task during the current season. If 30 days is not acceptable to the Department, U. S. Sugar requests some other period less than 160 days. In any event, the language suggested above would be an improvement over that in the proposed permit.

# Specific Condition 13

This condition would limit sulfur dioxide emissions from Boiler No. 4 while burning 100% bagasse to 0.166 lb/million Btu heat input. As I discussed with Mr. Hanks, this figure is considerably lower than the limit on the original Boiler No. 4 permit (0.25 lb/MM btu), and is also lower than the figure for 100% bagasse burning stated in U. S. Sugar's application to increase Boiler No. 4's capacity (0.19 lb/MM Btu). In light of Mr. Hanks's explanation of the 0.166 figure, U. S. Sugar is prepared to accept such a sulfur dioxide limit provided that language such as the following in the Technical Evaluation for the proposed permit is incorporated into Specific Condition 13 of the final permit:

[The Department] will reevaluate this reduced [sulfur dioxide] standard, without penalty to the applicant, if Technical data is submitted to the Department prior to the expiration of this construction permit that confirms the emissions from bagasse are different under the two operation modes (bagasse only v. bagasse/oil combination).

Clair Fancy, P.E. February 4, 1987 Page 4

Mr. Hanks stated that such a provision could be added to the permit condition.

I would also note here that the proposed permit contains two specific conditions numbered 13.

# Specific Condition 16

As written, the second sentence of this condition would require particulate matter and visible emissions compliance testing with Boiler No. 4 "operating at its maximum permitted heat input (777.2 MM Btu/hr)". Mr. Hanks indicated that the Department is willing to revise this sentence in recognition that the 777.2 million Btu/hr figure is a peak that will be rarely if ever reached, and of the impossibility of operating a bagasse fired boiler at an exact capacity level at any given time. The following language is suggested:

As a condition of this permit, particulate matter and visible emissions tests shall be conducted concurrently on the boiler while it is operating at an average steam production rate of approximately 369,000 lb/hr (approximately 707 million Btu/hr).

Based on my discussions with Mr. Hanks, it is U. S. Sugar's understanding that the word "approximately" as used in this condition would allow compliance testing to be conducted at 90-100 percent of the capacity specified, consistent with the language of Specific Condition 9 of the proposed permit.

## Testing Requirements

Because certain of the permit provisions on compliance testing might be confusing, I would like to confirm U. S. Sugar's understanding on this point as agreed with Mr. Hanks. The only compliance testing definitely required during the term of the proposed construction permit would be for particulate matter and visible emissions, pursuant to Specific Condition 16. In accordance with the first sentence of Specific Condition 16, compliance with all other emission limits (i.e., those for SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC) may be based on emission factors established by previous EPA reference method tests on Boiler No. 4. We understand this

Clair Fancy, P.E. February 4, 1987 Page 5

to mean that the language relating to compliance testing for  $\mathrm{SO}_2$  (Specific Condition 13), CO and VOC (the second Specific Condition 13) and  $\mathrm{NO}_{\mathrm{X}}$  (Specific Condition 15) is not intended to impose a requirement to conduct a compliance test under the construction permit if U. S. Sugar wishes to rely on previous test results for these pollutants. Mr. Hanks confirmed our understanding on this point, and this letter will serve to memorialize that agreement.

# Technical Evaluation

There is one portion of the Technical Evaluation that merits comment because as written it might cause confusion. In section I.B. of the Technical Evaluation document, the statement is made that "Heat input would increase from 545.5 to 777.2 million Btu/hr." This is somewhat misleading, as the original construction permit and current operating permit for Boiler No. 4 refer to the heat input figure of 545.5 as a "six hour average", while the 777.2 figure under the proposed permit is a one hour average. The appropriate comparison would be between heat input rates of 545.5 million Btu/hr and 706.6 million Btu/hr, as both are six hour averages.

In closing, I would like to thank you and Mr. Hanks for your consideration in this permitting effort. U. S. Sugar appreciates the expeditious handling of the permit to date, and would emphasize how important it is to obtain the final permit as soon as possible.

Please call me if there are any questions about this matter.

Sincerely,

Peter C. Cunningham

PCC/gb

cc: Willard Hanks
A. R. Mayo
Peter Barquin

# HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

SUITE 420, FIRST FLORIDA BANK BUILDING POST OFFICE BOX 6526 TALLAHASSEE, FLORIDA 32314

CARLOS ALVAREZ BRIAN H. BIBEAU ELIZABETH C. BOWMAN WILLIAM L. BOYD, IV RICHARD S. BRIGHTMAN PETER C. CUNNINGHAM WILLIAM H. GREEN WADE L. HOPPING FRANK E. MATTHEWS RICHARD D. MELSON WILLIAM D. PRESTON CAROLYN S. RAEPPLE GARY P SAMS ROBERT P SMITH, JR.

(904) 222-7500

February 4, 1987

JAMES S. ALVES KATHLEEN BLIZZARD ANNE W. CLAUSSEN C. TIMOTHY GRAY ELEANOR M. HUNTER CHERYL G. STUART

OF COUNSEL W. ROBERT FOKES

# BY HAND DELIVERY

Dale H. Twachtmann, Secretary c/o Office of General Counsel Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32301

> U. S. Sugar Corporation Clewiston Mill Boiler No. 4 Permit No. AC 26-126965

Dear Secretary Twachtmann:

On January 22, 1987, U. S. Sugar Corporation received the Department's Intent to Issue the above-referenced air construction permit, which would authorize an increase in the production capacity of Boiler No. 4 at its Clewiston Mill. The proposed permit was issued by the Department's Bureau of Air Quality Management, along with a Technical Evaluation and Preliminary Determination. Pursuant to Florida Administrative Code Rule 17-103.155 and the Intent to Issue, U. S. Sugar has until February 5, 1987 to file a petition for administrative proceedings regarding Department's Intent to Issue Permit No. AC 26-126965 ("the proposed permit").

I am writing on behalf of U. S. Sugar Corporation to request an extension of twenty-eight (28) days, to and including March 5, 1987, in which to file a petition for administrative proceedings regarding the proposed permit. This request is made pursuant to Florida Administrative Code Rule 17-103.070, which provides that a timely request for extension of time shall toll the running of the time period in which to file an appropriate petition. As good cause for granting the requested extension of time for filing, U. S. Sugar would show the following:

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Dale H. Twachtmann, Secretary February 4, 1987 Page 2

- 1. The proposed permit would authorize an increase in the production capacity of an existing bagasse-fired boiler previously permitted by the Department. The proposed permit contains eighteen specific conditions, and U. S. Sugar believes several of the permit provisions should be revised or are in need of clarification.
- 2. I recently met with staff of the Bureau of Air Quality Management's Central Air Permitting Section to discuss U. S. Sugar's concerns regarding the proposed permit. Based on that discussion, it appears that virtually all of my clients concerns have been satisfactorily resolved. My letter to Mr. Clair Fancy confirming the points of agreement reached regarding changes to the proposed permit is being submitted concurrently with this request for extension of time.
- 3. This request is filed as a protective measure to avoid waiver of U. S. Sugar's rights to challenge any provision of the proposed permit. Grant of this request will allow the parties an opportunity to conclude discussions of the permit conditions and to achieve a mutually acceptable resolution of U. S. Sugar's concerns without the need for initiation of formal administrative proceedings.

I hereby certify that I have spoken with Julia Cobb Costas, Assistant General Counsel for the Department, and that she is in agreement with the grant of this request.

Accordingly, I respectfully request that you formally extend the time for filing of a petition for administrative proceedings in regard to the Department's proposed agency action as embodied in its Intent to Issue Permit No. AC 26-126965 to and including March 5, 1987.

Sincerely,

Peter C. Cummingham

PCC/gb

cc: Julia Cobb Costas, Esquire
 Clair Fancy
 Willard Hanks
 A. R. Mayo

#### STATE OF FLORIDA

# DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ GOVERNOR DALE TWACHTMANN

DALE TWACHTMANN SECRETARY

PERMITTEE: U.S Sugar Corporation P. O. Drawer 1207 Clewiston, Florida 33440 Permit Number: AC 26-126965 Expiration Date: July 1, 1987 County: Hendry

Latitude/Longitude: 26° 44' 30"N

80° 56' 15"W

Project: Boiler No. 4 Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Authorization to increase the heat input and steam production of the Foster Wheeler boiler No. 4 at U.S. Sugar Corporation's existing sugar mill that is located near the intersection of W. C. Owens Avenue and Clewiston Street in Clewiston, Hendry County, Florida. The UTM coordinates of this site are zone 17, 506.1 km E and 2956.9 km N.

The modification shall be in accordance with the application (cover letter dated October 28, 1986) received November 3, 1986, and the additional information submitted in the Mr. Mayo's letter dated December 4, 1986, except for the changes mentioned in the Technical Evaluation and Preliminary Determination and listed as Specific Conditions in this permit to construct.

## Attachments:

- 1. U.S. Sugar Application received November 3, 1986.
- 2. U.S. Sugar letter dated December 4, 1986.

Jssoed 2/16/87

Permit Number: AC 26-126965 Expiration Date: July 1, 1987

## GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
- 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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute a waiver of 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 acknowledgement 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

Permit Number: AC 26-126965 Expiration Date: July 1, 1987

## GENERAL CONDITIONS:

- 6. The permittee shall at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
  - a. Having access to and copying any records that must be kept under the conditions of the permit;
  - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
  - c. Sampling or monitoring 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 notify and provide the department with the following information:
  - a. a description of and cause of non-compliance; and
  - b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

Permit Number: AC 26-126965 Expiration Date: July 1, 1987

### **GENERAL CONDITIONS:**

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 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
- 10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
- 11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
- 13. This permit also constitutes:
  - ( ) Determination of Best Available Control Technology (BACT)
     ( ) Determination of Prevention of Significant Deterioration (PSD)
  - ( ) Compliance with New Source Performance Standards.
- 14. The permittee shall comply with the following monitoring and record keeping requirements:
  - a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

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### GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
  - the date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling or measurements;
  - the date(s) analyses were performed;
  - the person responsible for performing the analyses;
  - the analytical techniques or methods used; and
  - 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 submitted or corrected promptly.

## SPECIFIC CONDITIONS:

1. Steam production, steam pressure, steam temperature, heat input, and bagasse consumption shall not exceed the following:

Steam press.	Steam temp. °F	Avging. time *	Steam Prod. lb/hr	Heat input 10 <sup>6</sup> Btu/hr	Bagasse Consum. lbs/hr-wet
850	900	Max.	346,231	777.2	215,889
		6-hr avg	314,757	706.6	196,264
600	750	Max.	368,500	777.2	215,889
,		6-hr avg	335,000	706.6	196,264

<sup>\*</sup>Maximum is a l hour average.

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### SPECIFIC CONDITIONS:

- 2. Heat input from No. 6 residual oil shall not exceed 225 million Btu per hour which is approximately equivalent to 1,500 gallons per hour of oil and 150,000 pounds per hour of steam. The boiler shall be built so that not more than two burners with two oil guns each (total of four oil guns) can be installed with a total maximum capacity not to exceed the permitted oil input.
- 3. During any 12 month period, the maximum quantity of No. 6 residual oil burned in boiler No. 4 shall not exceed 500,000 gallons.
- 4. During any 24 hour period, not more than 40,800 gallons of fuel oil shall be burned in all stationary fuel oil burning equipment at the plant. All permits to operate other oil burning equipment at this plant shall be revised to include this limitation prior to the issuance of a permit to operate boiler No. 4.
- 5. During any 3 hour period, not more than 6,300 gallons of fuel oil shall be burned in all stationary fuel oil burning equipment at the plant. All permits to operate other oil burning equipment at this plant shall be revised to include this limitation prior to the issuance of a permit to operate boiler No. 4.
- 6. All stationary fuel oil burning equipment at the plant shall be equipped with integrating fuel oil flow meters or continuous recorders to measure the amount of fuel oil consumed by the equipment. Oil meter readings on all oil consuming equipment shall be read and logged at least once every three hours, unless oil consumption for the equipment is recorded continuously, and these records shall be kept for at least five years for department inspection. Each meter shall be calibrated annually by a method approved by the department.
- 7. A test shall be made on Boiler No. 4 to determine its actual thermal efficiency in accordance with the ASME short-form procedure each time the operating permit for this boiler is renewed. The test shall be done while the tubes are clean and within 14 days of the compliance test. A current report on the thermal efficiency test must be included with the application to operate this boiler.

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SPECIFIC CONDITIONS:

8. The scrubber controlling the emissions from Boiler No. 4 which was built to Joy Manufacturing Company's specifications for their Turbulaire, Type D, Size 200 spray impingement scrubber shall be equipped with instruments to measure the gas pressure drop and pH of the scrubber water. Instruments to continuously record the scrubber water pressure and volumetric flow shall also be provided. During the first 160 days of operation following the issuance of this construction permit, one reading every 4 hours of the gas pressure drop shall be taken and logged for each day that boiler No. 4 operates. If any reading is twenty-five percent below the average pressure drop recorded during the compliance test, the department may require a compliance test at the lower pressure drop and may also require the installation of an instrument to continuously measure and record the gas pressure drop.

Readings every 4 hours of the pH of the scrubber water shall be taken and logged for each day during which bagasse is burned in boiler No. 4 during its first 160 days of operation following issuance of this construction permit. The department will be notified if chemicals are used to adjust pH. If any pH value falls more than ten percent below the pH that existed during the compliance test for sulfur dioxide, the department may require the installation of an instrument to continuously measure and record scrubber water pH.

During compliance testing, the scrubber parameters shall be measured and recorded at 15 minute intervals.

Records of the measurements required by this condition shall be obtained for the first 160 days of operation of boiler No. 4 after issuance of this construction permit and copies of the records transmitted to the South Florida District and Bureau of Air Quality Management at the end of the season(s).

After review of the 160 days of data, the Bureau of Air Quality Management and the South Florida District will establish the scrubber parameters to be monitored and the frequency of monitoring. These requirements shall become a condition to any permit to operate issued to boiler No. 4. The records required by the permit to operate shall be kept for five years for agency inspection.

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## SPECIFIC CONDITIONS:

9. Particulate matter emissions from boiler No. 4 shall not exceed 0.150 lb/million Btu heat input for bagasse fuel or 0.10 lb/million Btu heat input for No. 6 residual oil fuel. that both fuels are burned concurrently, the allowable particulate matter emissions shall be prorated from the allowable standards for each fuel by their respective heat inputs. Compliance with the particulate matter standards shall be determined by EPA Reference Methods 1, 2, 3, 4, and 5 as described in 40 CFR 60, Appendix A. The compliance test results shall be calculated by assuming the thermal efficiency of boiler No. 4 is 55 percent, or any new method subsequently adopted by department rule. informational purposes only, the particulate matter emission rate shall also be calculated by utilizing both the F factor (for each compliance test) and the short term ASME boiler efficiency test results (once every five years). Scrubber parameters listed in Specific Condition No. 8 shall be recorded every 15 minutes or continuously during the compliance test.

All compliance tests shall be conducted while the boiler is operating within 10 percent of its maximum or permitted capacity, whichever is lower. The South Florida District office shall be notified 15 days prior to any compliance test.

- 10. Visible emissions from boiler No. 4 shall not exceed 20 percent opacity except that 40 percent opacity is allowed for 2 minutes during any hour. Compliance with the standard shall be determined by DER Method 9 as described in Chapter 17-2, FAC. The particulate matter emissions and visible emissions shall be determined concurrently. Under circumstances when this is not feasible, the Company shall obtain prior approval from the South Florida District to conduct the tests at separate times. In such circumstances, the tests shall be conducted as close to each other as is feasible.
- 11. Any No. 6 residual fuel oil burned in this boiler shall contain no more than 2.50 percent sulfur and shall be replaced during the season in which it is burned with fuel oil containing no more than 1.50 percent sulfur. Compliance with this condition shall be determined from certified analysis of the replacement oil by ASTM Method D-129. Records of the quantity and analysis of fuel oil consumed in boiler No. 4 and invoices for the oil purchased shall be kept for a minimum of five years for regulatory agency inspection.

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## SPECIFIC CONDITIONS:

12. Sulfur dioxide emissions from boiler No. 4, while it is burning 100 percent bagasse fuel, shall not exceed 0.166 lb/million Btu heat input as determined by EPA Method 6 as described in 40 CFR 60, Appendix A. The compliance test results shall be calculated by assuming the thermal efficiency of Boiler No. 4 is 55 percent, or any new method subsequently adopted by department rule. The department will reevaluate this sulfur dioxide standard, without penalty to the applicant, if technical data is submitted to the department prior to the expiration of this construction permit that confirms the emissions from bagasse are different under the two operation modes (bagasse only versus bagasse/oil combination). For informational purposes only, the sulfur dioxide emission rate shall also be calculated by utilizing both the F factor (for each compliance test) and the short term ASME boiler efficiency test results (once every five years). Scrubber parameters listed in Specific Condition No. 8 shall be recorded every 15 minutes or continuously during the compliance test.

All compliance tests shall be conducted while the boiler is operating within 10 percent of its maximum or permitted capacity, whichever is lower. The South Florida District Office shall be notified 15 days prior to any compliance test.

Sulfur dioxide emissions from boiler No. 4, while it is burning a mixture of oil and bagasse, shall not exceed 680 lb/hr.

- 13. Emissions of carbon monoxide and volatile organic compounds shall be maintained at the lowest possible level through the implementation of an Operation and Maintenance plan that is approved by the department. Emissions of carbon monoxide shall not exceed 0.25 lb/million Btu as determined by EPA Method 10. Emissions of volatile organic compounds shall not exceed 1.7 lb/ton of wet bagasse as determined by EPA Method 25. These test methods are described in 40 CFR 60, Appendix A. Compliance tests for these pollutants will not be required if the visible emissions from boiler No. 4 are below 20 percent opacity.
- 14. Visible emissions from the bagasse handling systems shall not exceed 10 percent opacity over any 6 minute period as measured by EPA Reference Method 9, provided, however, that this visible emissions limit shall not apply during periods of high winds (wind speed of 18 miles per hour or greater) if reasonable precautions (covered conveyors, windbreaks, and the height of drop points are minimized) to control fugitive emissions have been taken. The Company shall maintain a meteorological instrument to record the wind speed at the plant site.

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### SPECIFIC CONDITIONS:

15. Nitrogen oxides emissions, expressed as NO<sub>2</sub>, shall not exceed 192.4 lb/hr (max.) and 180.7 lb/hr (6 hr avg.) as determined by EPA Reference Method 7 described in 40 CFR 60, Appendix A. After the initial compliance test, the Company may substitute an Operation and Maintenance plan that is approved by the department that optimized the NO<sub>X</sub> emissions for the compliance tests specified in this specific condition if the initial Method 7 test show compliance.

- 16. Compliance with all emission standards for boiler No. 4, except particulate matter and visible emissions, may be based on emission factors established by previous EPA reference method tests on this boiler. As a condition of this permit, particulate matter and visible emissions tests shall be conducted concurrently on the boiler while it is operating at its average steam production rate of approximately 315,000 lbs/hr of 850 psig stream or 335,000 lbs/hr of 600 psig steam (approximately 707 MMBtu/hr). The applicant will demonstrate compliance with the conditions of the construction permit and submit a complete application for a permit to operate to the South Florida District Office 90 days prior to the expiration date of this construction permit. The applicant may continue to operate in compliance with all terms of this construction permit until its expiration date.
- 17. Any permit to operate issued for Boiler No. 4 will limit operation to 160 days per season; require the scrubber to be operated at a six hour average pressure drop not less than 90 percent of the six hour average pressure drop that existed during the particulate matter test that showed compliance or not less than 75 percent of the average six hour pressure drop at any time; require, as a minimum, annual particulate matter and visible emission tests; an annual operation report which will include the amount of oil burned at the plant to determine compliance with the limits on oil usage in this permit, and the sulfur content of the residual oil purchased for the season; and a monthly summary of the scrubber parameters listed in Specific Condition No. 8.

Issued this / day of feet, 1987
STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary