

Check Sheet

Company Name: Osceola Farms, Inc.
 Permit Number: AC 50-112 861
 PSD Number: _____
 Permit Engineer: _____

Cross References:
☒ AC 50-043777
☒ AC 50-79267
☐

Application:

- ☒ Initial Application
- ☐ Incompleteness Letters
- ☒ Responses
- ☐ Waiver of Department Action
- ☐ Department Response
- ☐ Other

Intent:

- ☒ Intent to Issue
- ☒ Notice of Intent to Issue
- ☒ Technical Evaluation
- ☒ BACT or LAER Determination
- ☒ Unsigned Permit

Correspondence with:

- ☒ EPA
- ☐ Park Services
- ☐ Other
- ☒ Proof of Publication
- ☐ Petitions - (Related to extensions, hearings, etc.)
- ☒ Waiver of Department Action
- ☐ Other

Final

Determination:

- ☒ Final Determination
- ☒ Signed Permit
- ☒ BACT or LAER Determination *signed*
- ☐ Other

Post Permit Correspondence:

- ☐ Extensions/Amendments/Modifications
- ☐ Other

OSCEOLA FARMS CO.
RAW SUGAR FACTORY

TELEPHONE:
(305) 924-7156

INTERSECTION U.S. 98 & HATTON HWY.

POST OFFICE BOX 679
PAHOKEE, FLORIDA 33476

CABLE: SUGAR

DER

JAN 20 1987

BAQM

January 13, 1987

Mr. Richard S. DuBose
Chief, Southern Compliance Sect.
U.S. E.P.A.
345 Courtland Street N.E.
Atlanta, Georgia 30365

Dear Dick:

This is to serve as written notice of Osceola's date for the second compliance test on Boiler# 6.

Osceola will begin the compliance testing on January 29, 1987 as required in the Operation and Maintenance Agreement. These tests should be completed in one to three days, conditions permitting.

We will notify you of the results as required in the Operation and Maintenance Agreement.

If you have any questions, please feel free to call.

Very truly yours,

OSCEOLA FARMS CO.

Bob Jackson
Robert E. Jackson, Jr.
Vice President

REJ, Jr./pn
sc: A.L. Fanjul
C. Fancy
D. Knowles
M. Garcia

Certified # P-539 521 477
Return Receipt Requested

Patty - done 1/22
copy Pennington
give to Willard
Clem

PM
11-19-86
Pahokee, FL

OSCEOLA FARMS CO.
RAW SUGAR FACTORY

TELEPHONE:
(305) 924-7156

INTERSECTION U.S. 98 & HATTON HWY.

POST OFFICE BOX 679
PAHOKEE, FLORIDA 33476

CABLE: SUGAR

November 18, 1986

DER

NOV 21 1986

BAQM

Mr. Richard S. DuBose
Chief, Southern Compliance Sect.
U.S. E.P.A.
345 Courtland Street N.E.
Atlanta, Georgia 30365

Dear Dick:

This is to serve as written notice of Osceola's dates for the correlation testing and the first compliance test on Boiler # 6.

Osceola will begin the correlation testing required in the Operation and Maintenance Agreement two weeks from today, weather permitting. These test runs should be completed in one to three days. Osceola will begin compliance testing as soon as the correlation tests are completed. Again, this test should be completed in one to three days.

We will notify you of the results as required in the Operation and Maintenance Agreement.

If you have any questions, please feel free to call.

Very truly yours,

OSCEOLA FARMS CO.

Bob Jackson

Robert E. Jackson, Jr.
Vice President

REJ,Jr./io
sc: A.L.Fanjul
C. Fancy
D. Knowles
M. Garcia

Certified #0094895
Return Receipt Requested

*Patty - done 11/24
copy Penny for
put this in PEO file*

P 408 532 077

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Bob Jackson	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date 10/15/86	

PS Form 3800, Feb. 1982

UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete Items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.



PENALTY FOR PRIVATE
USE, \$300

RETURN
TO

DER

OCT 20 1986

BAQM

Dept. of Environmental Regulation

BAQM (Name of Sender)

2600 Blair Stone Road

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

Tallahassee, FL 32399-2400

(City, State, and ZIP Code)

Attn: Patty Adams

<p>SENDER: Complete items 1, 2, 3 and 4.</p> <p>Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.</p>	
<p>1. <input type="checkbox"/> Show to whom, date and address of delivery.</p> <p>2. <input type="checkbox"/> Restricted Delivery.</p>	
<p>3. Article Addressed to:</p> <p>Mr. Bob Jackson Osceola Farms Company P. O. Box 679 Pahokee, FL 33476</p>	
<p>4. Type of Service:</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail</p>	<p>Article Number</p> <p>P 408 532 077</p>
<p>Always obtain signature of addressee <u>or</u> agent and <u>DATE DELIVERED.</u></p>	
<p>5. Signature - Addressee</p> <p>X</p>	
<p>6. Signature - Agent</p> <p>X <i>Mauro P. Beys</i></p>	
<p>7. Date of Delivery</p>	
<p>8. Addressee's Address (<i>ONLY if requested and fee paid</i>)</p>	

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Bob Jackson
Vice President
Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476


October 14, 1986

Enclosed is Permit Number AC 50-112851 to Osceola Farms Company which authorizes the modification of the No. 6 bagasse-fired boiler at Osceola Farms Company's sugar mill in Pahokee, Palm Beach County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 of Appeal must be filed within 30 days from the date this permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


C. H. Rancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

Frank S. Kleeman, P.E.
Peter C. Cunningham
Bruce P. Miller
David Knowles
Gene Sacco

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on Oct. 15, 1986 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Patricia G. Adams
Clerk

Oct. 15, 1986
Date

Final Determination

Osceola Farms Company
Pahokee, Florida
Palm Beach County

No. 6 Bagasse-Fired Boiler Modification
File No. AC 50-112851

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

October 13, 1986

Final Determination

The Technical Evaluation and Preliminary Determination for the proposed modification of the No. 6 bagasse-fired boiler was distributed on January 29, 1986. Copies of the evaluation were available for public inspection at the Department's offices in Tallahassee and Ft. Myers, the Health Department Office in West Palm Beach, and the Municipal Library in Belle Glade. The Notice of Proposed Agency Action on the permit application was published in the Palm Beach Post on February 7, 1986.

Comments on the Department's intent to issue the permit were received from EPA and the applicant. In a letter dated March 12, 1986, EPA expressed concern with the increased ambient air impact for particulate matter resulting from the higher steam production rate, the statement that the PSD permit issued by EPA did not have to be revised for this modification, and the alleged violation associated with the bagasse handling system for the boiler.

Modeling results do indicate that the particulate matter ambient air quality 24-hour standard could be exceeded at the higher steam production rate. A close examination showed the exceedance would occur on plant property. The applicant has agreed to increase the height of the stacks on several existing boilers to eliminate the predicted ambient air violation of the particulate matter standard on plant property. See Item A.1. of Peter Cunningham's September 22, 1986, letter for more information on this matter. Specific Condition No. 13 is added to the permit to require the stack heights to be raised on three existing boilers and to limit the steam production of the existing boilers.

EPA has stated that the federal permit for boiler No. 6 (PSD-FL-080) would have to be revised prior to the boiler operating at the higher steam production rate. By copy of this Final Determination, the Department is requesting EPA to review the applicant's request and, if it is determined the boiler will comply with the federal regulations at the higher steam production rate, to modify the federal permit issued for this boiler. Specific Condition No. 14, which prohibits operation at the higher steam production rate prior to receiving a modified permit from EPA, is added to the state permit as a condition for this boiler modification.

The South Florida District office observed violations of the visible emissions standard by the bagasse handling system for this boiler. The company has agreed to a plan and schedule to bring the material handling system into compliance. The Department has revised Specific Condition No. 5 to require

reasonable precautions to control the fugitive emissions from the bagasse handling system. EPA and the company have entered into a consent order for this source not complying with conditions in the original construction permit for this source. EPA took the lead on enforcement.

A meeting between the Department and the applicant was held on September 16, 1986. Peter Cunningham's September 22, 1986, letter summarizes the issues discussed at this meeting. In response to the applicant's requests, the following specific conditions were changed in the permit to construct.

Specific Condition No. 1 - Revised to require the temperature and pressure of the steam from Boiler No. 6 to be recorded and to clarify that the limits on steam production, temperature, and pressure are one hour averages.

Specific Condition No. 4 - The emission standard for particulate matter is lowered to 54 lbs/hr. The sulfur dioxide standard is changed to 0.50 lb/MMBtu. Maximum lbs/hr sulfur dioxide emissions are unchanged. The original LAER determination for VOC of 0.24 lbs/MMBtu, which included the right to lower the standard based on actual test results on this boiler, is retained. Allowable VOC emissions can be 86 lbs/hr which is a 10 TPY increase over the presently permitted limit. This increase in VOC emissions will not subject the modification to new regulations. The visible emissions standard is increased to 30% opacity as specified in the original permit to construct and BACT determination for this boiler. It was also noted that the emission standards do not apply for periods during startup, shutdown, and malfunction which cannot exceed two hours per 24 hour period unless specifically authorized by the South Florida District.

Use of other EPA approved test methods may be allowed to prove compliance after following appropriate department procedures.

Specific Condition No. 5 - The visible emissions standard for the bagasse handling system is not applicable during periods of high wind (above 18 mph) provided the applicant has taken reasonable precautions to minimize fugitive emissions.

Specific Condition No. 7 - Reworded to clarify under what conditions and frequency the scrubber parameters are to be recorded.

Specific Condition No. 9 - Reworded to clarify the compliance testing requirements.

Specific Condition No. 11 - Reworded to clarify when the application for the permit to operate is to be submitted.

As the boiler has ceased operation for this season, the Department has extended the expiration date of the construction permit to allow the company more time next season to test the boiler under the modified operating conditions and prepare an application for permit to operate at the new conditions.

Footnote (d) of Table I in the Preliminary Determination should have said, "185,000 lbs/hr maximum steam production allowed" to be consistent with Specific Condition No. 1.

The final action of the Department will be to issue the construction permit as proposed in the Technical Evaluation and Preliminary Determination except for the changes noted above.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

Permit Number: AC 50-112851
Expiration Date: June 30, 1987
County: Palm Beach
Latitude/Longitude: 26° 49' 45"N
80° 33' 00"W
Project: No. 6 Boiler Modifications

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 steam production in the existing No. 6 bagasse-fired (No. 6 oil supplementary fuel) boiler which is equipped with an impingement type scrubber, from 150,000 to 185,000 pounds of 240 psig/550°F steam per hour. The No. 6 boiler is located at Osceola Farms Company's existing sugar mill that is approximately 6 miles northeast of Pahokee, Palm Beach County, Florida, on U.S. Route 98. The UTM coordinates of the plant are zone 17, 544.2 km E and 2968.0 km N.

The modification shall be in accordance with the attached permit application, plans, documents, and drawings except as noted in the specific conditions of this permit.

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER form 17-1.202(1), received November 14, 1985.
2. November 27, 1985, Hopping, Boyd, Green and Sam's letter.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 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.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 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.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 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.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1987

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 shall not exceed 185,000 lbs/hr (1 hr avg) of 240 psig and 550°F steam (1 hr avg). Steam with a higher enthalpy shall not be produced by this boiler without prior approval of the department. The boiler shall be equipped with an instrument to continuously record steam production, temperature, and pressure. Steam parameter records shall be kept for a minimum of 5 years.
- 2. Heat input to this boiler shall not exceed 357 million Btu per hour as determined by an energy balance that assumes the boiler is 55 percent efficient. Approximately 50 TPH of wet bagasse will produce 357 million Btu per hour.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1987

SPECIFIC CONDITIONS:

3. Heat input from No. 6 residual oil to this boiler shall not exceed 9.8 million Btu per hour. Approximately 65 gallons per hour of No. 6 oil will produce 9.8 million Btu per hour. The fuel oil system shall be equipped with an integrating fuel oil flow meter or continuous recorder to measure the amount of fuel oil consumed by the boiler. The measuring device shall be calibrated annually by a method approved by the Bureau of Air Quality Management. The company shall meter daily fuel oil consumption by other boilers and the No. 6 boiler separately. The total quantity of fuel oil consumed on a daily basis by the No. 6 boiler shall be replaced by the addition to the fuel system of an equal or greater amount of 1.0 percent or less sulfur fuel oil within 72 hours (excluding weekends). Sulfur content of the fuel oil purchased for boilers 2, 4, and 5 shall not exceed 2.4 percent. Oil records shall be retained for 5 years. Operating permits for boilers 2, 4, and 5 shall be amended to reflect burning of the blended oil. The total fuel oil consumption for all existing and proposed boilers shall not exceed 10,000 gallons on a daily basis.

4. The maximum allowable emissions from the No. 6 boiler shall be as follows:

Pollutant	Max. Emission Rate (lb/10 ⁶ Btu)*	Max. Emissions (lbs/hr)
Particulate Matter	0.15 (bagasse) 0.1 (fuel oil)	54
Sulfur Dioxide	0.50 (bagasse) 2.6 (fuel oil)	186
Nitrogen Oxides	0.16 (bagasse) 0.40 (fuel oil)	62
Volatile** Organic Compounds	0.24 (bagasse) 0.002 (fuel oil)	86
Carbon Monoxide	0.27 (bagasse) 0.033 (fuel oil)	91
Visible Emissions	30% Opacity (6 minute average except 40% opacity allowed for 2 minutes/hour)	

*When bagasse and oil are burned together, the allowable emissions are determined by prorating the standards for each fuel by the heat input.

** Subject to revision based on emissions test data obtained as a condition of this permit.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1987

SPECIFIC CONDITIONS:

Compliance with the standards shall be determined by EPA Reference Methods 1, 2, 3, 4, 5, 6, 7, 7E (if and when adopted by the department), 8, 9, 10, 25, and 25A as described in 40 CFR 60, Appendix A.

Excess emissions resulting from startup, shutdown, or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of the excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the department (South Florida District) for longer duration (FAC 17-2.250). All startups, shutdowns, and malfunctions shall be recorded on the operating log for this boiler.

5. Visible emissions from the bagasse handling system 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.

6. Any No. 6 fuel oil burned in the No. 6 boiler shall contain no more than 2.4 percent sulfur. Boiler No. 1 shall be put in a normal standby condition while all of the other boilers are in operation. Boiler No. 1 can be operated to produce steam when one of the other boilers is not operating.

7. The scrubber shall be equipped with a manometer or equivalent instrument to measure the total pressure drop of the flue gas stream across the scrubber, with pressure gauges to measure the water pressure at the spray nozzles, and with a flow meter or equivalent device (weir) to measure the quantity of water circulating through the scrubber. Data from these instruments shall be recorded once per shift (every 8 hours) and available to regulatory agencies for 5 years. The pH of the scrubber water at the scrubber inlet and outlet shall be measured and recorded once per day, and the data shall remain available for 5 years. During particulate matter and sulfur dioxide compliance tests, these parameters shall be recorded every 15 minutes. Other than during startups, shutdowns, and malfunctions (of up to two hours per 24 hour period) which must be recorded on the boiler operations log, Boiler No. 6 shall not be operated if the pressure drop across the scrubber is less than 7 inches of water, the pressure on the spray nozzles is less than 30 psig, and the flow through the scrubber is less than 300 GPM. These parameters may be changed in the future by the department (BAQM) if other values show compliance.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1987

SPECIFIC CONDITIONS:

8. Prior to the expiration of this construction permit, a test shall be made on the No. 6 boiler to determine its actual thermal efficiency in accordance with the ASME short-form procedure. This test must be repeated each time the permit to operate this boiler is renewed (every 5 years). The tests shall be done while the tubes are clean and within 14 days of the compliance tests. A current report on the thermal efficiency test must be included with the application for permit to operate this boiler.

9. Prior to the expiration of this construction permit, compliance tests on Boiler No. 6 shall be conducted for each of the pollutants for which emission limits are prescribed in Specific Condition 4, in accordance with the EPA reference methods listed in Specific Condition 4. The particulate matter and visible emissions compliance tests shall be conducted concurrently while Boiler No. 6 is operating at an average steam production rate within 10% of its permitted capacity. Any permit to operate issued for Boiler No. 6 shall restrict its maximum steam production rate to 185,000 lb/hr (1 hr avg) if the particulate matter compliance tests was conducted within 10% of the boiler's permitted capacity, or 110% of the average rate that existed during the particulate matter compliance tests if the boiler was operating at less than 90% of its permitted capacity during the test. The compliance test results shall be calculated by assuming the thermal efficiency of the boiler is 55 percent, or by any new method subsequently adopted by department rule. For information purposes only, the particulate matter emission rate shall also be calculated by utilizing both the F factor and the actual boiler efficiency as determined by the latest ASME boiler efficiency test. The scrubber parameters listed in Specific Condition No. 7 that existed during the particulate matter and sulfur dioxide compliance tests shall be included in the tests report. The South Florida District office shall be notified 15 days prior to any compliance test.

10. After the initial reference method tests that showed compliance with the allowable emission standards for this boiler, the company may substitute an Operation and Maintenance plan that is approved by the BAQM that optimizes the NO_x, CO, SO₂, and VOC emissions for the compliance tests specified in Specific Conditions Nos. 4 and 9.

11. The permittee will demonstrate compliance with the conditions of this construction permit and submit a complete application for permit to operate Boiler No. 6 to the South Florida District office by March 31, 1987. A copy of the initial emission tests report for all

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1987

SPECIFIC CONDITIONS:

regulated air pollutants shall be sent to the Bureau of Air Quality Management. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date. Commercial operation of this boiler is not authorized unless it is in compliance with all conditions in the applicable permits.

12. Any permit to operate issued for the No. 6 boiler shall limit its operation to 157 days per season and the steam production capacity to 185,000 lbs/hr or 110% of the average rate that existed during a particulate matter compliance test conducted at less than 90% of the boiler's permitted capacity; requires (as a minimum) annual particulate matter and visible emissions tests; and an annual operation report which includes the quantity of oil burned in this boiler during the season and sulfur content of the replacement oil purchased.

13. Prior to operating Boiler No. 6 at a steam production rate above 150,000 lbs/hr, the permittee shall raise all stacks for boilers No. 2, 4, and 5 by ten feet above the current height (i.e., from 72 feet to 82 feet).

The maximum 24-hour average steam production rates for existing boilers Nos. 2, 3, 4, and 5, shall not exceed the following:

Boiler No. 2	140,000 lbs/hr (24 hr avg)
Boiler No. 3	90,000 lbs/hr (24 hr avg)
Boiler No. 4	140,000 lbs/hr (24 hr avg)
Boiler No. 5	165,000 lbs/hr (24 hr avg)

14. Boiler No. 6 shall not be operated at a rate above 150,000 lb/hr steam production until federal permit PSD-FL-080 is modified by EPA to authorize the higher steam production rate.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1987

SPECIFIC CONDITIONS:

Issued this 13 day of October 1986

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

TO: _____ LOCTN: _____
TO: _____ LOCTN: _____
TO: _____ LOCTN: _____
FROM: _____ DATE: _____

TO: Victoria J. Tschinkel
FROM: Clair Fancy *CF*
DATE: October 13, 1986
SUBJ: Approval of Air Construction Permit

Attached for your approval and signature is one air construction permit to Osceola Farms Company to modify the No. 6 bagasse-fired boiler at the company's existing sugar mill in Pahokee, Palm Beach County, Florida.

The waiver date, after which the permit would be issued by default, is October 23, 1986.

The Bureau recommends your approval and signature.

CF/pa

Attachment

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

SUITE 420, FIRST FLORIDA BANK BUILDING

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

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CAROLYN S. RAEPPE

September 22, 1986

OF COUNSEL
W. ROBERT FOKES

BY HAND DELIVERY THIS DATE

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

DER
SEP 22 1986
BAQM

Re: Osceola Farms Company -- Boiler No. 6
Air Construction Permit Modification (AC 50-112851)

Dear Clair:

On behalf of Osceola Farms Company, I would like to thank you and the other BAQM staff for taking the time to meet with Bob Jackson, David Buff, Joe Mercadante and me on September 16 to discuss the referenced permit modification. At your suggestion, I am writing to memorialize our discussions and to confirm the points of agreement reached at that meeting. We hope that this will facilitate the expeditious issuance of the final permit modification by the Department for the requested increase in Boiler No. 6's steam production rate.

A. Issues Raised in EPA Comments

In a letter to you dated March 12, 1986, the U. S. Environmental Protection Agency's Region IV Office raised two issues concerning the Department's preliminary determination on the Boiler No. 6 permit modification. Osceola's responses on these two issues, as discussed at our September 16th meeting, are set forth below.

1. Particulate Matter AAQS

EPA's letter indicated that the results of atmospheric dispersion modeling indicate predicted exceedances of the National Ambient Air Quality Standard (NAAQS) for particulate matter (24-hour averaging time) with the proposed steam production rate increase for Boiler No. 6. As EPA recognized, this predicted impact results only at

C. H. Fancy, P.E.
September 22, 1986
Page 2

receptor points well within the property boundaries (sugar cane fields) of Osceola Farms Company. Because of questions about the accessibility of the Osceola property to the general public, however, EPA suggested that the air above the Osceola cane fields may have to be considered "ambient air" to which the NAAQS apply.

Osceola does not agree that the air above its property should be considered "ambient air", and thus does not concede that compliance with the State or National AAQS should be evaluated within its property boundaries. Rather than make an issue of this point, however, and in the hope of expediting the issuance of the modified permit for Boiler No. 6, Osceola proposes to raise the stacks of several boilers at the mill to a height sufficient to avoid any predicted AAQS exceedances at any receptor point, including those with its property boundaries. Specifically, Osceola proposes to raise the stacks for Boilers No. 2 (two stacks), 4 and 5 (two stacks) by ten feet above their current stack height. The attached air quality impact analysis prepared by KBN Engineering and Applied Sciences (Attachment "A") demonstrates that, with the raised stacks at Boilers No. 2, 4 and 5, no AAQS exceedances are predicted at any receptor with Boiler No. 6 operating at the requested steam production rate (185,000 lb/hr). Osceola is willing to accept a condition in the final permit for Boiler No. 6 that reads as follows:

Prior to operating Boiler No. 6 at a steam production rate above 150,000 lb/hr, permittee shall raise the stacks for Boilers No. 2, 4 and 5 by ten feet above the current height (i.e., from 72 feet to 82 feet).

To address one other question raised at our September 16, 1986 meeting relating to the steam production capacity of Boilers No. 2 - 5, Osceola is willing to accept a condition in the final permit for Boiler No. 6 that reads as follows:

The maximum permitted 24-hour average steam production rates for Boilers No. 2, 3, 4 and 5 shall be as set forth below:

Boiler No. 2	140,000 lb/hr (24 hour average)
Boiler No. 3	90,000 lb/hr (24 hour average)
Boiler No. 4	140,000 lb/hr (24 hour average)
Boiler No. 5	165,000 lb/hr (24 hour average)

We would also note that the permit proposed by the Department does not contain any provision relating to the operation of Boiler No. 1 corresponding to Specific Condition 11 of the original Department air construction permit for Boiler No. 6 (AC 50-43777) and Specific Condition 12 of the currently effective Department air operation permit for Boiler No. 6 (AO-50-79267). Consequently, Osceola suggests that the Department consider adding a condition to the modified Boiler No. 6 permit similar to those in the previous permits, as follows:

Boiler No. 1 shall be put in a normal standby condition while all of the other boilers are in operation. Boiler No. 1 may be operated to produce steam when any one or more of the other boilers are not operating.

2. Sulfur Dioxide -- PSD Increment

The second issue raised in EPA Region IV's letter of March 17, 1986 concerned the predicted level of consumption of the 24-hour PSD increment for sulfur dioxide associated with the requested steam production rate increase for Boiler No. 6. That letter indicated an increment consumption figure of 93 micrograms per cubic meter, as compared to the maximum allowable increase of 91 micrograms per cubic meter for the 24-hour averaging time. Osceola has reviewed this question and is unable to understand the basis for EPA's increment consumption figure. As indicated in Attachment "B" hereto, which was prepared by David Buff of KBN, the correct sulfur dioxide increment consumption figure with the increased steam production rate for Boiler No. 6 (corresponding to a sulfur dioxide emission rate of 186.1 pounds per hour) is, at most, 87 micrograms per cubic meter for the 24-hour averaging time. Consequently, there is no predicted exceedance of the PSD increment associated with the requested permit modification. We intend to meet with EPA Region IV Air Programs Branch staff to review and, hopefully, resolve this issue. If, based on our discussions with EPA, a slightly lower sulfur dioxide emissions level (pounds per hour) is necessary to ensure compliance with the PSD increments, we will immediately advise the Department.

B. Specific Permit Condition

As we discussed on September 16th, Osceola believes that several of the Specific Conditions of the proposed modified

C. H. Fancy, P.E.
September 22, 1986
Page 4

permit for Boiler No. 6 would benefit from clarification or minor revision.

Specific Condition 4. -- There are several provisions of Specific Condition 4 that Osceola believes should be changed. First is the maximum emissions level (pounds per hour) for particulate matter, which we agreed should be changed from 54.6 to 53.6. The maximum emission rate (pounds per million Btu heat input) for sulfur dioxide from bagasse burning should be changed from 0.29 to 0.49. The maximum emission rate and the maximum emissions level for volatile organic compounds should be changed, respectively, from 0.10 pounds per million Btu heat input and 35.7 pounds per hour to 0.25 pounds per million Btu heat input and 90.4 pounds per hour. The latter figures are those included in the permit application, and they correspond to an increase in annual VOC emissions of 18.9 tons per year as compared to the new source review significant increase figure of 40 tons per year.

The last proposed limit that merits revision is the visible emissions limit of 20 percent opacity (with provision for up to 40 percent opacity for two minutes per hour). This is significantly more restrictive than the original opacity limit of 30 percent specified in the State and federal air permits for Boiler No. 6 on the basis of the Department's BACT determination. We are aware of no justification for imposing a more stringent limit in connection with this permit modification, as the Department's emission limiting standards for new carbonaceous fuel burning equipment with greater than 30 million Btu per hour heat input capacity continue to specify a visible emissions limit of 30 percent opacity (with up to 40 percent opacity for two minutes per hour). See F.A.C. Rule 17-2.600(10(b)2.a.

In addition to the changes in the emission limits, Osceola recommends that the following sentence be added to Specific Condition 4 of the modified permit:

The above emission limits shall not apply during periods of startup, shutdown and malfunction pursuant to the provisions of F.A.C. Rule 17-2.250.

The final change we discussed in connection with Specific Condition 4 relates to the listed compliance testing methods. Osceola suggests the addition of the following EPA Reference Methods to this list: Method 7E (if and when

adopted by the Department) as an option for nitrogen oxides; Method 8 as an option to allow simultaneous particulate matter and sulfur dioxide testing; Method 18 as an option for volatile organic compounds; and Method 25A as another option for volatile organic compounds.

To summarize, Osceola requests that Specific Condition 4 of the final permit modification read as follows:

4. The maximum allowable emissions from the No. 6 boiler shall be as follows:

Pollutant	Max. Emission Rate (lb/10 ⁶ Btu)	Max. Emissions (lb/hr)
Particulate Matter	0.15 (bagasse) 0.1 (fuel oil)	53.6
Sulfur Dioxide	0.49 (bagasse) 2.6 (fuel oil)	186.1
Nitrogen Oxides	0.16 (bagasse) 0.40 (fuel oil)	62.0
Volatile Organic Compounds	0.25 (bagasse) 0.002 (fuel oil)	90.4
Carbon Monoxide	0.27 (bagasse) 0.007 (fuel oil)	90.4
Visible Emissions	30% Opacity (6 minute average except 40% opacity allowed for 2 minutes/hour)	

The above emission limits shall not apply during periods of startup, shutdown and malfunction pursuant to the provisions of F.A.C. Rule 17-2.250.

Compliance with the standards shall be determined by EPA Reference Methods 1, 2, 3, 4, 5, 6, 7, 7E (if adopted by the Department), 8, 9, 10, 18, 25 and 25A as described in 40 CFR Part 60, Appendix A.

Specific Condition 5 -- As you know, the Florida Sugar Cane League has recently proposed a shift in approach for dealing with fugitive emissions from bagasse handling systems at sugar mills. Osceola supports this effort and hopes that the Department will agree to utilize specific work practice and control technique requirements as "reasonable precautions" in lieu of opacity limits for sugar mills. Until that matter is resolved, however, Osceola recommends that some provision for high wind situations be added to the proposed permit condition, as follows:

5. Visible emissions from the bagasse handling system 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).

Specific Condition 7 -- Osceola does not object to the substance of this condition as it appears in the proposed permit modification. As we discussed with you, however, a few revisions are warranted. The first would change the once per shift recording requirement for scrubber water pH measurements to once per day. This should be sufficient in that the Boiler No. 6 scrubber has a once-through water circulation system, and Osceola is not claiming any significant sulfur dioxide removal efficiency. We would also recommend that the requirement to frequently record water scrubber parameters during compliance testing be made specific to sulfur dioxide tests. It is also important to clarify that the prohibition on boiler operation when certain scrubber operating parameters fall below prescribed levels is not applicable during startup and shutdown modes. Consequently, Osceola requests that Specific Condition 7 be revised to read as follows:

7. The scrubber shall be equipped with a manometer or equivalent instrument to measure the total pressure drop of the flue gas stream across the scrubber, with pressure gauges to measure the water pressure at the spray nozzles, and with a flow meter or equivalent device (weir) to measure the quantity of water circulating through the scrubber. Data from these instruments shall be recorded once per shift and available to regulatory agencies for 5 years. The pH of the scrubber water at the scrubber

inlet and outlet shall be measured and recorded once per day, and the data shall remain available for 5 years. During the sulfur dioxide compliance test, the scrubber parameters specified above shall be measured and recorded every 15 minutes. Other than during startup and shutdown periods (of up to four hours each), Boiler No. 6 shall not be operated if the pressure drop across the scrubber is less than 7 inches of water, the pressure on the spray nozzles is less than 30 psig, and the flow through the scrubber is less than 300 GPM. These parameters may be increased in the future if higher values are needed to assure compliance.

Specific Condition 9 -- Based upon our discussion of the compliance testing requirements for Boiler No. 6, Osceola requests that Specific Condition 9 be clarified to read as follows:

9. Prior to the expiration of this construction permit, compliance testing of Boiler No. 6 shall be conducted for each of the pollutants for which emission limits are prescribed in Specific Condition 4, in accordance with the EPA Reference Methods listed in Specific Condition 4. The particulate matter and visible emissions compliance tests shall be conducted concurrently while Boiler No. 6 is operating at an average steam production rate within 10% of its permitted capacity. Any permit to operate issued for Boiler No. 6 shall restrict its maximum steam production rate to 185,000 lb/hr (1 hr avg) or 111% of the average rate that existed during the particulate matter compliance test, whichever is lower. The compliance test results shall be calculated by assuming the thermal efficiency of the boiler is 55 percent, or by any new method subsequently adopted by department rule. For information purposes only, the particulate matter emission rate shall also be calculated by utilizing both the F factor and the actual boiler efficiency as determined by the latest ASME boiler efficiency test. The scrubber parameters listed in Specific Condition

No. 7 that existed during the particulate matter and sulfur dioxide compliance tests shall be included in the test report. The South Florida District office shall be notified 15 days prior to any compliance test.

Specific Condition 11 -- Because of the delays in resolving various permit and enforcement issues, the schedule for submittal of an operation permit application for Boiler No. 6 must be changed from that indicated in Specific Condition 11 of the proposed permit modification. As we agreed on September 16th, the first sentence of Specific Condition 11 will be revised to read as follows:

11. The permittee will demonstrate compliance with the conditions of this construction permit and submit a complete application for a permit to operate Boiler No. 6 by March 31, 1987. A copy of the initial emission test reports for all regulated air pollutants shall be sent to the Bureau of Air Quality Management. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date. Commercial operation of this boiler is not authorized unless it is in compliance with all conditions in the applicable permits.

Specific Condition 12 -- To conform to Specific Condition 7, Specific Condition 12 should be revised to read as follows:

12. Any permit to operate issued for the No. 6 boiler shall limit its operations to 157 days per season and the steam production capacity to 185,000 lb/hr or 111% of the steam production rate which existed during the Reference Method 5 particulate emissions test, require (as a minimum) annual particulate matter and visible emissions tests, and an annual operation report which includes the quantity of oil burned in this boiler during the season and sulfur content of the replacement oil purchased.

Permit Expiration Date -- As we agreed in our meeting on September 16th, the expiration date of the final modified

C. H. Fancy, P.E.
September 22, 1986
Page 9

construction permit for Boiler No. 6 will be changed to June 30, 1987 on the appropriate pages of the permit.

In conclusion, I would emphasize that it is extremely important to Osceola Farms Company that the final permit modification for Boiler No. 6 be issued before the beginning of the upcoming sugar cane grinding season. The crop season is now scheduled to start for Osceola on October 22, 1986. Because EPA has advised that the federal PSD permit must be modified before Boiler No. 6 can operate at the increased steam production rate, and because EPA's permit action must follow the Department's, it is essential that the State permitting be completed as soon as possible. Osceola will be working with EPA Region IV staff in the meantime in an effort to expedite the federal permit modification.

The consideration you and your staff have given to Osceola in this matter is very much appreciated. If you have any questions regarding Osceola's comments on the proposed permit, please do not hesitate to call me.

Sincerely,



Peter C. Cunningham

PCC/gb

cc: Bill Thomas
Willard Hanks
Max Linn
Julia Cobb Costas, Esquire
Bruce Miller
Jeff Pallas

OSCEOLA FARMS

Boiler No. 6 Steam Rate Increase

TSP Air Quality Impact Analysis

Prepared by:

KBN Engineering and Applied Sciences
Gainesville, Florida
September, 1986

Attachment "A"

1.0 INTRODUCTION

This document presents an analysis of the total suspended particulate (TSP) impacts associated with a requested steam rate increase for Boiler No. 6 at Osceola Farms. Osceola Farms is an existing sugar cane mill located in Palm Beach County, Florida. The analysis is in response to a concern raised in Florida DER's letter to Osceola Farms dated February 17, 1986, and U.S. EPA Region IV's letter to Florida DER dated March 12, 1986. The concern centered on compliance with the 24-hour ambient air quality standard (AAQS) for TSP. The 24-hour TSP AAQS is 150 ug/m^3 , not to be exceeded more than once per year at any receptor location.

2.0 OSCEOLA FARMS OPERATING DATA

An atmospheric dispersion modeling analysis of particulate matter (PM) emissions from Osceola Farms sugar mill was performed to demonstrate compliance with the 24-hour TSP AAQS. The analysis addressed emissions from Boilers No. 2 through 6 operating at their nominal maximum steam rates, and emitting PM at their respective allowable rates. Boiler No. 6 was evaluated operating at its maximum increased steam production rate of 185,000 lb/hr. The heat input rates for these steam production rates were provided by Osceola Farms. The PM emissions reflect permitted allowables. These conditions reflect the following operating parameters for each boiler:

Boiler	Steam Production Rate (lb/hr)	Heat Input Rate (10 ⁶ Btu/hr)	PM Emissions	
			(lb/10 ⁶ Btu)	(lb/hr)
2	140,000	270.0	0.3	81.0
3	90,000	147.3	0.3	44.2
4	140,000	270.0	0.3	81.0
5	165,000	318.3	0.2	63.7
6	<u>185,000</u>	<u>357.0</u>	0.15	<u>53.6</u>
Totals	720,000	1362.6		323.5

The stack gas flow rates and velocities for all boilers were determined from the most recent stack test on each boiler (i.e., '85 - '86 crop season), adjusted based upon steam production rate. The stack parameters used in the modeling analysis are shown in Table 1.

The initial modeling evaluation using the above worst-case operating data indicated potential exceedances of the 24-hour TSP AAQS. In order to mitigate these potential exceedances, Osceola Farms is proposing to increase stack heights on three boilers (Boiler Nos. 2, 4 and 5) by ten (10) feet each. Since Boiler Nos. 2 and 5 each have two stacks, a total of five (5) stacks will be raised by Osceola Farms. Current stack heights for these boilers are 72 feet. The proposed increased stack heights for these boilers, as well as the existing stack heights of the other boilers at Osceola Farms, are shown in Table 1.

3.0 MODELING METHODOLOGY

The modeling analysis was performed using the same general methodology as was used in the 1981 PSD permit application for Boiler No. 6. The Industrial Source Complex Short-Term (ISCST) model was used in the analysis to predict 24-hour TSP concentrations due to the emissions from the Osceola mill.

The area immediately surrounding the Osceola mill consists of sugar cane fields under ownership or control by Osceola. Osceola's property boundaries are shown graphically in Figure 1. The distance from the Osceola Farm boiler house to the Osceola property boundaries exceeds 2000 m in all directions. Normally, receptors for modeling impacts would be located at or beyond the property boundaries. However, because of U.S. EPA's concerns over public access, all areas, including plant property, were evaluated for air quality impacts. A receptor grid consisting of 36 radials spaced 10° apart, with receptors spaced at 200 m and ranging from 200 m to 1400 m from the plant, was used in the analysis. This receptor grid was designed to determine Osceola Farm's maximum impact at any location, regardless of property boundaries.

Meteorological data used in the modeling analysis consisted of five years of hourly surface data from West Palm Beach, Florida (1970 - 1974) and coincident upper air data from Miami, Florida. The sugar cane processing season in Florida generally runs from mid-October to mid-March (about 150 days per year). Because the exact crop season days can vary from year to year, the 182-day period extending from October through March was evaluated to determine maximum 24-hour impacts. Since five years of meteorological data were used in the evaluation, the second-highest 24-hour impacts at each receptor were selected for comparison to air quality standards (i.e., the highest predicted concentration at each receptor was discarded).

In the 1981 PSD application for Osceola Boiler No. 6, a 24-hour background TSP level of 40 ug/m^3 was established. This background level was added to the model results to predict total air quality impacts.

4.0 TSP IMPACT ANALYSIS RESULTS

The modeling analysis of the Osceola Farms mill produced the following second-highest 24-hour TSP concentrations for each year of meteorology (Osceola impacts only):

Year	Julian Day	Second-Highest 24-Hour Concentration ($\mu\text{g}/\text{m}^3$)	Radial Direction (Degrees)	Distance (m)
1970	280	84	250	800
1971	319	109	260	800
1972	347	80	270	1000
1973	284	98	250	800
1974	294	96	240	800

Because a 200 m spacing along each radial was used, further refinement of the highest, second-highest concentration of $109 \mu\text{g}/\text{m}^3$ (Day 319, 1971) was performed. This concentration was refined by using a radial receptor grid consisting of seven (7) radials spaced at 2° increments. Five (5) receptors were placed along each radial, ranging from 700 m to 1100 m. The resulting refined concentration was also $109 \mu\text{g}/\text{m}^3$. Adding a $40 \mu\text{g}/\text{m}^3$ background level to this highest, second-highest concentration results in a total 24-hour TSP impact of $149 \mu\text{g}/\text{m}^3$, which is below the TPS 24-hour AAQS of $150 \mu\text{g}/\text{m}^3$. As a result, the increased emissions from Boiler 6 due to operation at its maximum steam rate is predicted not to exceed the AAQS.

Table 1. Stack Parameters Used in the TSP Modeling Analysis

Boiler No.	Height (ft)	Diameter (ft)	Flow Rate (ACFM)	Exit Velocity (fpm)	Exit Temperature (°F)
2*	82 ⁺	5.00	70,000	3566	155
3	72	6.33	90,000	2857	155
4	82 ⁺	6.00	104,580	3699	155
5*	82 ⁺	5.00	57,750	2941	155
6	90	6.33	92,600	2940	155

* Two identical stacks on each of these boilers; figures refer to each stack

+ Represents an increase of 10 feet above current stack height

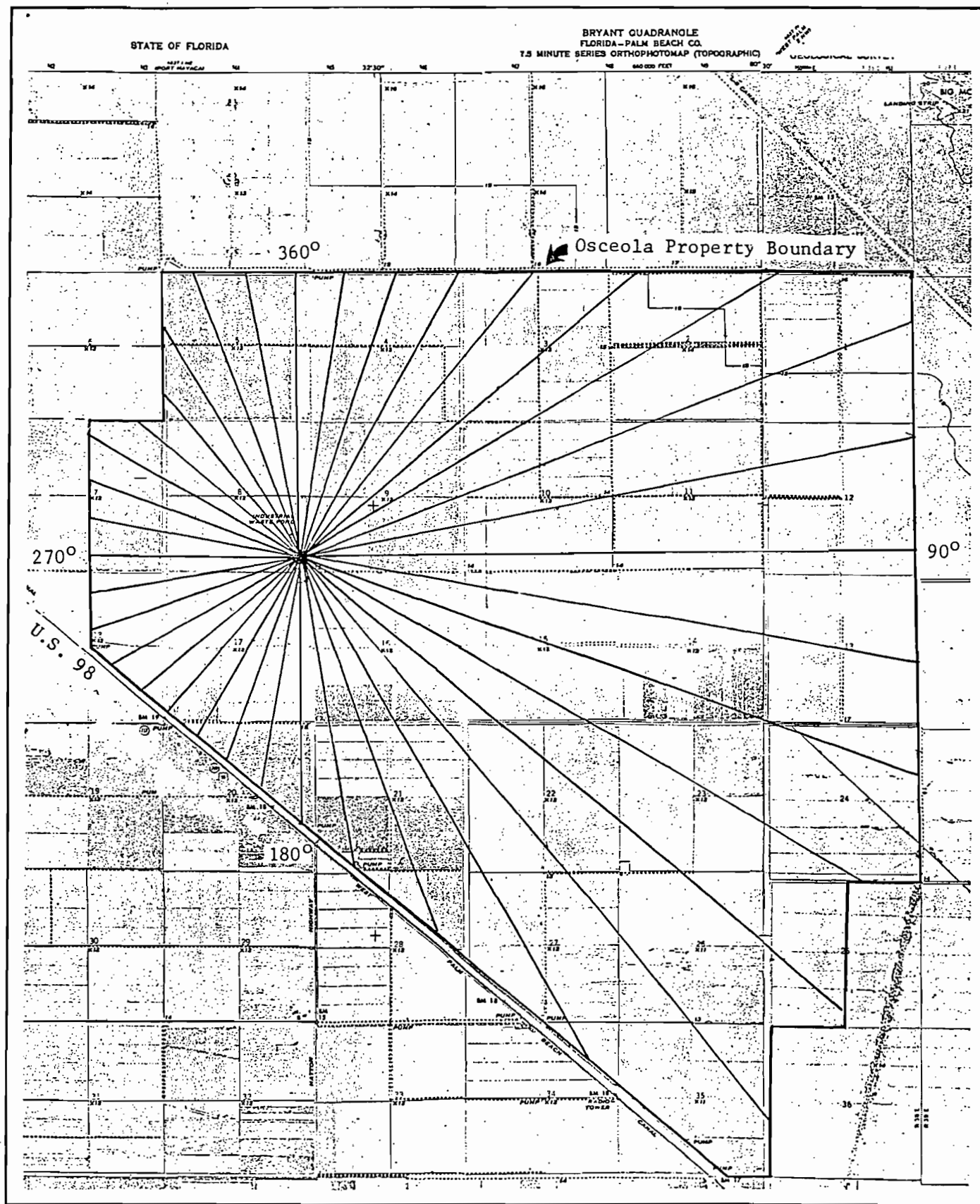


Figure 1. Osceola Farms Property Boundaries
(10° Radials Indicated)

Scale: 0.7 in. = 1 km



SO₂ Increment Consumption

Calculation of the total 24-hour sulfur dioxide PSD increment consumption for the Osceola mill, considering the increased steam production rate for Boiler No. 6, was based upon the previously determined SO₂ increment consumption and recent modeling for Boiler No. 6. Total 24-hour SO₂ increment consumption due to the Osceola mill, including Boiler No. 6 at its initially permitted capacity of 150,000 lb/hr steam, was stated to be 77 ug/m³ [reference Florida Department of Environmental Regulation Technical Evaluation and Preliminary Determination (September 25, 1981) and Final Determination for DER Construction Permit No. AC 50-43777 (November 12, 1981) and EPA PSD Permit No. PSD-FL-080 (December 4, 1981)]. This total is below the 91 ug/m³ allowable PSD increment, and includes the construction of Boilers No. 5 and 6 and the standby status of Boiler No. 1 (when all of the other boilers are operating).

The air quality impact of emissions due to Boiler No. 6 only were evaluated in conjunction with the total suspended particulate (TSP) impact evaluation, contained in a separate Attachment "A" ("Osceola Farms, Boiler No. 6 Steam Rate Increase TSP Air Quality Impact Analysis", KBN Engineering and Applied Sciences, Inc., September, 1986). This analysis showed that the highest, second-highest 24-hour particulate matter (PM) impact of Boiler No. 6 emitting at 53.6 lb/hr, for the 5 years of meteorological data, was 14.9 ug/m³ (1971 meteorology). This equates to a maximum impact due to Boiler No. 6 of 0.28 ug/m³ for each 1.0 lb/hr emitted.

The proposed increased SO₂ emissions from Boiler No. 6 due to the requested steam rate increase is 35.2 lb/hr (186.1 lb/hr proposed minus 150.9 lb/hr previously permitted). This increased emission rate would translate into an increased maximum 24-hr SO₂ impact of 9.9 ug/m³, using the unit impact factor from above. If this 9.9 ug/m³ increase in impact is added directly to the 77 ug/m³ 24-hour increment consumption previously determined, the total 24-hour SO₂ PSD increment consumption becomes 87 ug/m³. This increment consumption is below the allowable increment of 91 ug/m³. It is noted that this methodology may overestimate actual increment consumption since it implies the previously determined 77 ug/m³ impact and the Boiler No. 6 maximum impact occur at the same location (i.e. impacts are directly additive), which is not necessarily a valid assumption.

Prepared by:

KBN Engineering and Applied
Sciences, Inc.
Gainesville, Florida
September, 1986

Attachment "B"

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

SUITE 420, FIRST FLORIDA BANK BUILDING

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

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STEVEN A. MEDINA
CAROLYN S. RAEPPLE

OF COUNSEL
W. ROBERT FOKES

September 17, 1986

BY HAND DELIVERY THIS DATE

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

Re: Osceola Farms Company
Boiler No. 6
Permit No. AC 50-112851

Dear Clair:

Enclosed please find a Waiver of 90 Day Time Limit filed on behalf of Osceola Farms Company in regard to the referenced air construction permit. I have executed this fifth waiver on behalf of Osceola Farms for the reasons stated in my letter to you of March 21, 1986, and in accordance with the discussions with you and other Bureau of Air Quality Management staff at our meeting yesterday regarding the construction permit modification for Boiler No. 6.

Sincerely,


Peter C. Cunningham

PCC/gb

cc: Willard Hanks
Bob Jackson
William F. Tarr, Esquire

Enclosure

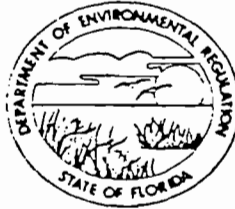
DER

SEP 17 1986

BAQM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301



DER

SEP 17 1986

BAQM

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. AC 50-112851

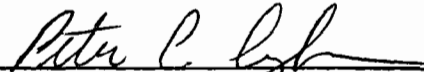
Applicant's Name: Osceola Farms Company

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above reference license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 23rd day of October 1986.

The undersigned is authorized to make this waiver on behalf of the applicant.


Signature


PETER C. CUNNINGHAM
HOPPING BOYD GREEN & SAMS

Please Type Name of Signee

P. O. Box 6526, Tallahassee, FL 32314
(904) 222-7500 September 17, 1986

Date

Sworn to and subscribed
before me this 17th day
of September 1986.


Notary Public

My Commission Expires:

DER Form 1-1.201(8)

Effective November 30, 1982

Notary Public, State of Florida
My Commission Expires May 17, 1990
Bonded Thru Troy Fain - Insurance Inc.

Page 1 of 2

Section 120.60, Florida Statutes

(2) When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions unless a shorter period of time for agency action is provided by law. The 90-day or shorter time period shall be tolled by the initiation of a proceeding under Section 120.57 and shall resume 10 days after the recommended order is submitted to the agency and the parties. Any application for a license not approved or denied within the 90-day period or shorter time period, within 15 days after conclusion of a public hearing held on the application, or within 45 days after the recommended order is submitted to the agency and the parties, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as prerequisite to licensure, the license shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to Section 120.57.

Section 403.0876, Florida Statutes

Permits; processing. ---Within 30 days after receipt of an application for a permit under this chapter, the department shall review the application and shall request submittal of all additional information the department is permitted by law to require. If the applicant believes any departmental request for additional information is not authorized by law or departmental rule, the applicant may request a hearing pursuant to s. 120.57. Within 30 days after receipt of such additional information, the department shall review it and may request only that information needed to clarify such additional information or to answer new questions raised by or directly related to such additional information. If the applicant believes the request of the department for such additional information is not authorized by law or departmental rule, the department, at the applicant's request, shall proceed to process the permit application. Permits shall be approved or denied within 90 days after receipt of the original application, the last item of timely requested additional material, or the applicant's written request to begin processing the permit application.

HOPPING BOYD GREEN & SAMS

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality Management

Florida Department of Environmental
Regulation

2600 Blair Stone Road, Room 306

Tallahassee, Florida 32301

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
WILLIAM L. BOYD, IV
PETER C. CUNNINGHAM
WILLIAM H. GREEN
WADE L. HOPPING
RICHARD D. MELSON
WILLIAM D. PRESTON
GARY R. SAMS
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JAMES S. ALVES
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ELIZABETH C. BOWMAN
RICHARD S. BRIGHTMAN
ANNE W. CLAUSSEN
FRANK E. MATTHEWS
STEVEN A. MEDINA
CAROLYN S. RAEPPEL

August 27, 1986

DER

AUG 27 1986

BAQM

OF COUNSEL
W. ROBERT FOKES

BY HAND DELIVERY THIS DATE

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

Re: Osceola Farms Company
Boiler No. 6
Permit No. AC 50-112851

Dear Clair:

Enclosed please find a Waiver of 90 Day Time Limit filed on behalf of Osceola Farms Company in regard to the referenced air construction permit. Osceola has executed this fourth waiver for the reasons stated in my letter to you of March 21, 1986, and in view of its currently ongoing settlement negotiations with the U. S. Environmental Protection Agency regarding a pending enforcement matter that may be relevant to the Department's action on the construction permit modification for Boiler No. 6.

Sincerely,

Peter C. Cunningham

Peter C. Cunningham *PC*

PCC/gb

cc: Willard Hanks
Bob Jackson
William F. Tarr, Esquire

Enclosure

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. AC 50-112851

Applicant's Name: Osceola Farms Company

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above reference license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 30th day of September 1986.

The undersigned is authorized to make this waiver on behalf of the applicant.

Signature
PETER C. CUNNINGHAM
HOPPING BOYD GREEN & SAMS

Please Type Name of Signee
P. O. Box 6526, Tallahassee, FL 32314
(904) 222-7500 August 27, 1986

Date

Subscribed
before me this 27th day
of August 1986.

Notary Public

My Commission Expires: May 17, 1990
Notary Public, State of Florida
Bonded thru Troy Fain - Insurance Inc.

DER Form 17-1.201(8)

Effective November 30, 1982

Page 1 of 2

Section 120.60, Florida Statutes

(2) When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions unless a shorter period of time for agency action is provided by law. The 90-day or shorter time period shall be tolled by the initiation of a proceeding under Section 120.57 and shall resume 10 days after the recommended order is submitted to the agency and the parties. Any application for a license not approved or denied within the 90-day period or shorter time period, within 15 days after conclusion of a public hearing held on the application, or within 45 days after the recommended order is submitted to the agency and the parties, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as prerequisite to licensure, the license shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to Section 120.57.

Section 403.0876, Florida Statutes

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HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

SUITE 420, FIRST FLORIDA BANK BUILDING

POST OFFICE BOX 6526

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FRANK E. MATTHEWS
STEVEN A. MEDINA
CAROLYN S. RAEPPLE

July 8, 1986

OF COUNSEL
W. ROBERT FOKES

DER

JUL 8 1986

BAQM

BY HAND DELIVERY

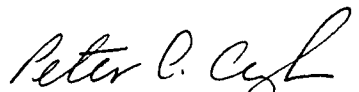
C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Re: Osceola Farms Company
Boiler No. 6
Permit No. AC 50-112851

Dear Clair:

Enclosed please find a Waiver of 90 Day Time Limit filed on behalf of Osceola Farms Company in regard to the referenced air construction permit. Osceola has executed this third waiver for the reasons stated in my letter to you of March 21, 1986, and in view of its currently ongoing settlement negotiations with the U. S. Environmental Protection Agency regarding a pending enforcement matter that may be relevant to the Department's action on the construction permit modification for Boiler No. 6.

Sincerely,


Peter C. Cunningham

PCC/gb

cc: Willard Hanks
Bob Jackson
William F. Tarr, Esquire

Enclosure

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTION 120.60(2), FLORIDA STATUTES

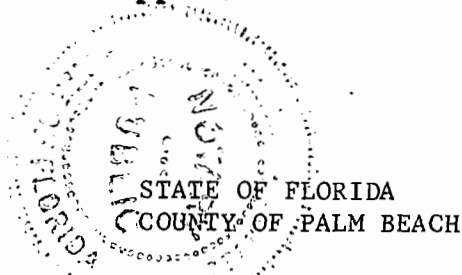
License (Permit, Certification) Application No. AC 50-112 851
Applicant's Name: Osceola Farms Co.

The undersigned has read Section 120.60(2), Florida Statutes, and fully understands the Applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the Applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by the Applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 31th day of August 19 86.

The undersigned is authorized to make this waiver on behalf of the applicant.



Maria P. Boyer

Sworn to and subscribed
before me this 3th day
of July 1986

Notary Public, State of Florida at Large
My Commission Expires July 23, 1989
BONDED THRU AGENT'S NOTARY BROKERAGE

DER

JUL 8 1986

BAQM

Bob Jackson
Signature

Robert E. Jackson, Jr.

Name of Signee

July 3th 1986
Date

Section 120.60, Florida Statutes

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DER

JUL 8 1986

BAQM

PM
6-17-87
West Palm Beach, FL

AC 50-112851

OSCEOLA FARMS CO.
RAW SUGAR FACTORY

TELEPHONE:
(305) 924-7156

INTERSECTION U.S. 98 & HATTON HWY.

POST OFFICE BOX 679
PAHOKEE, FLORIDA 33476

CABLE: SUGAR

June 15, 1987

Mr. Clair Fancy
Bureau of Air Quality Mgmt.
Deputy Chief - D.E.R.
2600 Blair Stone Road
Tallahassee, FL 32301

DER
JUN 19 1987
BAQM

Subject: Stack Test Review of Boiler #6
Conducted in December 1986

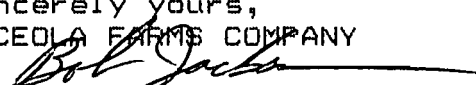
Dear Clair:

This letter is in response to your May 13, 1987 letter regarding the CO emission test on boiler #6. Your letter states that E.P.A. Method 3 is deficient and not acceptable for CO testing. It also asks that Osceola supply information if possible to justify the tester's use of E.P.A. Method 3 instead of E.P.A. Method 10.

I have attached an inter-office memorandum from and signed by yourself to David Knowles on December 7, 1982. The subject of the memo is "Compliance Testing for Bagasse Boilers." Osceola, Sugar Cane Growers Co-op, and Atlantic Sugar Association are specifically referred to along with their new boiler permits. I quote from the memo. "This memo describes the Bureau's intent on compliance testing of the three bagasse boilers under construction." The second page specifically states under the heading of Carbon Monoxide, "measurements of this pollutant should be obtained by E.P.A. Method 3 during the initial compliance test. These measurements will be adequate for the construction permit requirements."

We at Osceola have tried very hard to follow all of the requirements of our boiler permit. The rest of the Florida Sugar Industry uses E.P.A. Method 3 for CO testing.

I hope this information is sufficient to allow the past testing to be used for Osceola's Boiler #6.

Sincerely yours,
OSCEOLA FARMS COMPANY

Robert E. Jackson, Jr.
Vice President

REJ, Jr./pn
Encl.

c.c. Joe Mercadante
Peter Cunningham
David Knowles, 6/22/87

INTEROFFICE MEMORANDUM

To	_____	Loc'n	_____
From	_____	Loc'n	_____
Reply Options	_____	Reply Required	_____
Date Due	_____	Date Due	_____

TO: David Knowles
South Florida District

FROM: Clair Fancy, BAQM *[Signature]*

DATE: December 7, 1982

SUBJ: Compliance Testing for Bagasse Boilers

DEC 09 1982

During 1981, Osceola Farms Company, Sugar Cane Growers Cooperative of Florida, and Atlantic Sugar Association were issued state and federal permits to construct new bagasse fuel fired boilers. The construction permits contained standards for particulate matter, sulfur dioxide, carbon monoxide, volatile organic compounds and nitrogen oxides, and required testing by the reference methods listed in 40 CFR 60, Appendix A.

Field personnel have contacted several members of the BAQM staff and have received non-uniform answers to the Bureau's intent on compliance testing at the time the permits were issued. This memo describes the Bureau's intent on compliance testing of the three bagasse boilers under construction, and, unless the local situation dictates otherwise, should be used as a guideline for the required testing under both the construction and operating permits for the new bagasse fired boilers.

Particulate Matter and Visible Emission

Compliance tests by EPA methods 5 and 9, while the boilers are burning the maximum amount of bagasse they are capable of, must be performed and the test reports submitted as part of the application for the permit to operate.

If operating permits are issued to these sources, annual tests for both particulate matter and visible emissions should be required.

Sulfur Dioxide

Compliance tests by EPA method 6, while the boilers are burning the maximum amount of bagasse they are capable of, must be performed and the test reports submitted as part of the applications for permits to operate. The data should be used

to estimate a bagasse fuel emission factor for sulfur dioxide. If the emission factor appears reliable, sulfur dioxide emissions can be calculated and any permit to operate issued should require this be done annually. If there is large variation in the calculated emission factor and the boiler emissions approach the permit limits, then annual sulfur dioxide test should be required by any permits to operate issued for these boilers.

Carbon Monoxide

Measurements of this pollutant should be obtained by EPA method 3 during the initial compliance test. These measurements will be adequate for the construction permit requirement. Unless a local problem exists, CO tests should not be required routinely by any permit to operate issued for the sources.

Volatile Organic Compounds

VOC tests by EPA method 25 are required by the construction permits for these boilers to determine the amount of the new source allowance consumed. Once this is established it should not be necessary to test for this pollutant routinely, and there would be no need to include routine testing for VOC in the operating permit conditions.

Nitrogen Oxides

A measurement of this pollutant by EPA method 7 is required, primarily as a condition of the federal permits for these boilers. This is a one time requirement.

Boiler Efficiency

As a construction permit condition, boiler efficiency tests are to be submitted to the department for informational purposes. This should definitely be done. This is a long standing disagreement between FDER and the sugar producers. It appears as though a final resolution of this item will require considerable time and effort and probably head to head combat.

Mr. David Knowles

Page Three

December 7, 1982

Please contact this office if you have any questions on contents of this memo.

WH/ks

cc: Michael Martin
West Palm Beach County
Health Department
West Palm Beach, FL 33402

6-17-87
West Palm Beach, FL

AC 50-112851

OSCEOLA FARMS CO.
RAW SUGAR FACTORY

TELEPHONE:
(305) 924-7156

INTERSECTION U.S. 98 & HATTON HWY.

POST OFFICE BOX 679
PAHOKEE, FLORIDA 33476

CABLE: SUGAR

June 15, 1987

DER

JUN 19 1987

BAQM

Mr. Clair Fancy
Bureau of Air Quality Mgmt.
Deputy Chief - D.E.R.
2600 Blair Stone Road
Tallahassee, FL 32301

Subject: Stack Test Review of Boiler #6
Conducted in December 1986

Dear Clair:

This letter is in response to your May 13, 1987 letter regarding the CO emission test on boiler #6. Your letter states that E.P.A. Method 3 is deficient and not acceptable for CO testing. It also asks that Osceola supply information if possible to justify the tester's use of E.P.A. Method 3 instead of E.P.A. Method 10.

I have attached an inter-office memorandum from and signed by yourself to David Knowles on December 7, 1982. The subject of the memo is "Compliance Testing for Bagasse Boilers." Osceola, Sugar Cane Growers Co-op, and Atlantic Sugar Association are specifically referred to along with their new boiler permits. I quote from the memo. "This memo describes the Bureau's intent on compliance testing of the three bagasse boilers under construction." The second page specifically states under the heading of Carbon Monoxide, "measurements of this pollutant should be obtained by E.P.A. Method 3 during the initial compliance test. These measurements will be adequate for the construction permit requirements."

We at Osceola have tried very hard to follow all of the requirements of our boiler permit. The rest of the Florida Sugar Industry uses E.P.A. Method 3 for CO testing.

I hope this information is sufficient to allow the past testing to be used for Osceola's Boiler #6.

Sincerely yours,
OSCEOLA FARMS COMPANY

Robert E. Jackson, Jr.
Robert E. Jackson, Jr.
Vice President

REJ, Jr. /pn
Encl.

c.c. Joe Mercadante
Peter Cunningham

David Knowles 6/22/87

6-22-87

Sent Gary David Knowles, David if Dist
Wanted RM 10 test, BAQM would
Request same.

6-26-87

Told David if favored forgetting about
Method 10 test. He agreed. Did not
reply to letter.

lmh

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

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

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RICHARD S. BRIGHTMAN
ANNE W. CLAUSSEN
FRANK E. MATTHEWS
STEVEN A. MEDINA
CAROLYN S. RAEPPLE

May 9, 1986

OF COUNSEL
W. ROBERT FOKES

BY HAND DELIVERY THIS DATE

Clair Fancy
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301


Re: Osceola Farms Company
Boiler No. 6
Permit No. AC 50-112851

DER
MAY 9 1986
BAQM

Dear Mr. Fancy:

Enclosed please find a Waiver of 90 Day Time Limit filed on behalf of Osceola Farms Company in regard to the referenced air construction permit. Osceola has executed this second waiver for the same reasons stated in my letter to you of March 21, 1986.

Sincerely,


Peter C. Cunningham

PCC/gb

Enclosure

cc: Willard Hanks

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTION 120.60(2), FLORIDA STATUTES

License (Permit, Certification) Application No. AC 50-112 851
 Applicant's Name: Osceola Farms Co.

The undersigned has read Section 120.60(2), Florida Statutes, and fully understands the Applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the Applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by the Applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 15th. day of July 19 86.

The undersigned is authorized to make this waiver on behalf of the applicant.

STATE OF FLORIDA
 COUNTY OF PALM BEACH

Inene Okunewski

Sworn to and subscribed
 before me this 7th day
 of MAY 19 86.

NOTARY PUBLIC STATE OF FLORIDA
 MY COMMISSION EXP. JAN 3, 1988
 BONDED THRU GENERAL ISS. UED.

Bob Jackson
 Signature

Robert E. Jackson, Jr.
 Name of Signee

May 7, 1986
 Date

Section 120.60, Florida Statutes

(2) When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions. Any application for a license not approved or denied within the 90-day period or within 15 days after conclusion of a public hearing held on the application, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as a prerequisite to licensure, ²(the license) shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to s. 120.57.

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

TO: Al Devereaux

FROM: Clair Fancy *Clair Fancy*

DATE: April 9, 1986

SUBJ: Osceola Farms Company
Application for Permit to Modify Boiler No. 6*

FOR ROUTING TO OTHER THAN THE ADDRESSEE	
TO: _____	LOCN: _____
TO: _____	LOCN: _____
TO: _____	LOCN: _____
FROM: _____	DATE: _____

Osceola Farms Company was issued state (AC 50-79267) and federal (PSD-FL-080) permits to install the No. 6 bagasse-fired boiler in 1981. Both construction permits included limits on the emissions of criteria pollutants from the boiler, the number of days the boiler could operate, and visible emissions from the bagasse handling system. Modeling of the original emission data predicted the ambient air standard for particulate matter would be reached, but not exceeded, on the plant property.

Violations of conditions in the initial construction permit have occurred. The standards for particulate matter emissions and steam production by the boiler and visible emission by the bagasse handling system were exceeded. Enforcement action by both EPA and DER has been initiated against the Company. The latest compliance tests show the particulate matter emissions from the boiler meet the standard. The South Florida District has prepared a Consent Order, which the Company is expected to sign, that contains a compliance schedule to correct the visible emissions violation from the bagasse handling system. The Company has submitted an application for permit to construct which requests permission to operate the boiler at a higher steam production rate. The Company met with EPA on the steam production rate violations on February 11, 1986, but did not agree to pay the fine proposed by EPA. EPA proposed a fine of \$225,000 if the Company would provide an Operation and Maintenance plan. The Company offered to pay \$25,000 in fines.

An application for a permit to construct which request permission to operate at the higher steam production rate was received by BAQM on November 11, 1985. It was considered complete on November 27. The application was reviewed and the preliminary determination/draft permit was mailed on January 29, 1986. The public notice was published on February 7. The 90th day, after

* A similar application is being processed for Atlantic Sugar Association

Al Devereaux
Page Two
April 9, 1986

which the permit would be issued by default, was March 26. A waiver of the 90th day until May 12 was received on March 21.

The Preliminary Determination concluded the boiler could comply with the regulations at the higher steam production rate. It also said that the conditions in the new state permit would also apply to the federal permit originally issued for the boiler. The Preliminary Determination included a statement requiring all enforcement action to be resolved prior to the issuance of the construction permit. The Company will request revisions to the specific conditions regarding the production rate during compliance tests and restrictions on the scrubber operating parameters, and the expiration date of the permit.

EPA's permitting and enforcement staff in Atlanta sent comments on DER's intent to issue the permit.

Their comments are:

1. EPA, not DER, would have to revise the original federal permit for this boiler (PSD-FL-080).
2. The higher steam production rate will result in violations of the particulate matter and SO₂ ambient air quality standards (AAQS) on the plant property. They want to know the concentration off the plant property.
3. The permit can be issued with predicted violations of the AAQS on plant property only if the public is completely and effectively prohibited from the area by physical means such as fence, wall or other barrier.
4. EPA is investigating, and may comment later on possible AAQS violation if the boiler is operated 184 days (the entire season) instead of the 157 days proposed by the applicant and limited by a specific condition in the draft permit.

The BAQM position on EPA's comments are as follows:

1. EPA does have the right to revise their own permit. A new specific condition will be added to the state permit (if issued) saying the Company must obtain a revised permit from EPA prior to operating at the higher steam production rates.
2. The company is remodeling the emissions from the boiler. If the results show no violations of AAQS on property accessible

Al Devereaux
Page Two
April 9, 1986

to the general public, the permit can be issued. Violations of AAQS on restricted plant property will not prevent issuance of the permit (See 3).

3. DER does not agree with EPA on what plant property is accessible to the general public. EPA requires a fence or other physical barrier to prevent public access. DER believes the cane fields themselves form a reasonable barrier to the general public and the original permit to construct this boiler was issued on this belief.
4. EPA has sent a letter saying annual restrictions on hours or days of operation are not acceptable because they are difficult to enforce. Therefore, they want to model this boiler's emissions for the season (184 days) ignoring the plan by the company and the specific condition by DER to restrict the days per season that the boiler may operate. We normally restrict days/year and hours/day the source may operate on permits. Applicants many times use this to escape more stringent tier of review. Compliance with such conditions can be checked by plant records and annual operating reports.

In conclusion, DER can issue a state construction permit to Osceola for the higher steam production rate for boiler No. 6 if the company signs a consent order on the visible emissions violation of the bagasse handling system and the new modeling results do not show a violation of the AAQS off the plant property. EPA may not revise the federal permit if they believe the general public has access to plant property with predicted AAQS violations.

CHF/WH/s

cc: Steve Smallwood
Gary Early
David Knowles

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
WILLIAM L. BOYD, IV
PETER C. CUNNINGHAM
WILLIAM H. GREEN
WADE L. HOPPING
RICHARD D. NELSON
WILLIAM D. PRESTON
GARY R. SAMS
ROBERT R. SMITH, JR.

JAMES S. ALVES
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
RICHARD S. BRIGHTMAN
ANNE W. CLAUSSEN
FRANK E. MATTHEWS
STEVEN A. MEDINA
CAROLYN S. RAEPPLE

March 21, 1986

OF COUNSEL
W. ROBERT FOKES

BY HAND DELIVERY THIS DATE

Clair Fancy
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

DER
MAR 21 1986
BAQM

Re: Osceola Farms Company
Boiler No. 6
Permit No. AC 50-112851

Dear Mr. Fancy:

I am writing on behalf of Osceola Farms Company (Osceola) in regard to the referenced permit and your letter of February 17, 1986 pertaining to the permit. In that letter, and subsequent conversations with BAQM staff, the Department has advised that issuance of a final permit for Osceola's Boiler No. 6 would require resolution of certain enforcement actions and that the U. S. Environmental Protection Agency has raised concerns related to the air quality impact analysis for the increase in capacity for Boiler No. 6.

It is not clear that resolution of any outstanding enforcement issues is a legal prerequisite to issuance of a final permit in this case. Nonetheless, Osceola recognizes the Department's concerns in this regard. Moreover, Osceola intends to address the air quality impact issues mentioned in your letter of February 17, 1986 and in a subsequent letter from EPA Region IV dated March 12, 1986. Finally, Osceola has identified several provisions of the draft permit that appear to warrant revision, including the expiration date, the specific conditions concerning the relationship of the maximum operating rate and the capacity existing during compliance testing, and restrictions on scrubber operation parameters.

Clair Fancy
March 21, 1986
Page 2

In view of the apparent need for further discussion of the permit, and in reliance on the statement in your letter of February 17, 1986 that the 90-day deadline for final action on the permit expires on March 26, 1986, Osceola has executed the attached waiver of the 90-day time limit to enable the parties to attempt to informally resolve the issues mentioned above.

The continued cooperation of you and your staff in this matter is much appreciated.

Sincerely,


Peter C. Cunningham

PCC/gb

Attachment

cc: Willard Hanks

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTION 120.60(2), FLORIDA STATUTES

License (Permit, Certification) Application No. AC 50-112 851
Applicant's Name: Osceola Farms Co.

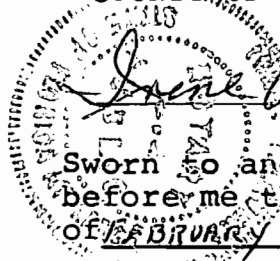
The undersigned has read Section 120.60(2), Florida Statutes, and fully understands the Applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the Applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by the Applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 12th day of May 19 86.

The undersigned is authorized to make this waiver on behalf of the applicant.

STATE OF FLORIDA
COUNTY OF PALM BEACH

 *Janet Okunewski*
Sworn to and subscribed
before me this 28th day
of FEBRUARY 19 86.

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXP. JAN 3, 1988
BONDED THRU GENERAL INS. CO.

Bob Jackson

Signature

Robert E. Jackson, Jr.

Name of Signee

February 28, 1986

Date

Section 120.60, Florida Statutes

(2) When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions. Any application for a license not approved or denied within the 90-day period or within 15 days after conclusion of a public hearing held on the application, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as a prerequisite to licensure, ² (the license) shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to s. 120.57.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

REF: 4APT-AP

MAR 12 1986

Mr. C. H. Fancy, Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

DER

MAR 17 1986

BAQM

RE: Permit Modification for Osceola Farms (PSD-FL-080)

Dear Mr. Fancy:

This is in response to your January 28, 1986, preliminary determination for the increased steam production of bagasse boiler No. 6 at the above referenced facility in Pahokee, Florida. The proposed modifications would allow Osceola to increase the steam production of bagasse boiler No. 6 by approximately 23% and decrease the permitted operating period from 172 days to 157 days.

We have reviewed the preliminary determination for the proposed minor modification and find that the draft State construction permit has provisions which will conflict with provisions of the EPA PSD permit (PSD-FL-080) issued for this boiler on December 4, 1981. Therefore, the EPA PSD permit will need to be modified by this office in accordance with the findings of your preliminary determination. However, before we proceed with the modifications, there are several issues which require resolution. These issues relate to the predicted exceedances of the particulate National Ambient Air Quality Standards (NAAQS) for the 24-hour averaging period and the sulfur dioxide 24-hour increment. The issues of NAAQS and increment exceedances are discussed in the following paragraphs.

The additional NAAQS and increment impacts from the proposed increase in emissions from bagasse boiler No. 6 of particulate matter and sulfur dioxide were calculated by multiplying the respective ambient impacts contained in the October 28, 1981, final determination for the facility by the boiler's proportional contribution and then by the fractional increase in emissions. The additional impacts were then added to the originally predicted ambient impacts to reveal a 24-hour TSP total ambient concentration of 155 ug/m^3 and a 24-hour SO_2 increment consumption of 93 ug/m^3 . Each of these predicted concentrations exceed the NAAQS and PSD increment (respectively). However, these impacts were modelled within the property boundaries of the Osceola Farms Company and there are no predicted exceedances of the NAAQS or increments outside of the property boundaries. In order to address

~~Chair~~
Bill

3/18

FYI - Copies sent
to everyone who
rec'd Preliminary -
Please return
for file -

Patty

Bill, Willard, Larry -

3/27

I need to be briefed
on this so we need to send
copy of this letter to Knowles
in Palm Beach County Health Dept.
We ought to have EPA walk
thru cane fields to see if
they agree it is a suitable
barrier.

this issue, the ambient air as it applies to protection of the ambient air quality standards and increments must be determined.

The Code of Federal Regulations (40 CFR 50.1(e)) defines ambient air as that portion of the atmosphere, external to buildings, to which the general public has access. This definition requires that the general public must be completely and effectively prohibited from the Osceola Farms property in order to disqualify the air space above the property as ambient air. The Memorandum of Law dated September 28, 1972, from the EPA Air Quality and Radiation Division (copy attached) states that in order to completely and effectively prohibit the general public access to the property, the property access must be restricted by physical means such as a fence, wall, or other barrier. EPA Region IV would not consider the cane fields themselves as physical barriers. However, a canal may be considered as a physical barrier if it sufficiently precludes access to the property.

We request that you consider the above in your evaluation of any request from the company in determining the affected ambient air space. In the event that the company is unable to demonstrate compliance with the ambient air standards using the existing modelling analysis, we suggest that the company reevaluate ambient air quality impacts to determine if the new operating parameters will have an effect on the predicted ambient concentrations. In addition, we are evaluating the possibility of multiple exceedances of the NAAQS which may occur as a result of using a 184 day period for determining annual values. A discussion of this issue will be forwarded to you in a separate letter.

Please notify us of any future determinations for this source and forward to us copies of any documentation you receive from Osceola Farms regarding the above issues. If you have any questions or comments regarding this letter, you may contact Mr. Dick Schutt, Acting Leader, Program Support Team at 404/347-4901.

Sincerely yours,

Bruce P. Miller

Bruce P. Miller
Acting Chief
Air Programs Branch

cc: James T. Wilburn, Chief
Air Compliance Branch

Joan Boilen, Chief
Air and Toxics Law Branch - ORC

ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF THE GENERAL COUNSEL

DER
MAR 17 1986
BAQM

Date: September 28, 1972
Reply to: Michael A. James, Attorney
Attn of: Air Quality and Radiation Division
Subject: Ambient Air Quality Monitoring by EPA
To: Jack R. Farmer, Chief
Plans Management Branch, SDID

MEMORANDUM OF LAW

FACTS

Your memorandum of September 12, 1972 informs us that the Standards Development and Implementation Division is initiating an air quality sampling program around a number of smelters for which emission regulations were proposed by EPA on July 27, 1972. Potential sites for locating monitoring equipment were based on diffusion model predictions. Some of these sites are on land owned by the smelters, e.g., at Kennecott Copper's Utah Smelter. The monitoring equipment at each of the sites would be operated by EPA personnel.

QUESTION #1

What is the meaning of the phrase "to which the general public has access" in EPA's definition of "ambient air"?

ANSWER #1

We believe that the quoted phrase is most reasonably interpreted as meaning property which members of the community at large are not physically barred in some way from entering.

QUESTION #2

Should a different definition of "ambient air" be made for primary versus secondary standards since secondary standards involve welfare and not the health of persons?

ANSWER #2

EPA's regulation defining "ambient air" makes no such distinction, and we find no suggestion in the Act that Congress intended such a distinction.

QUESTION #3

What type of approval from smelter officials is necessary in order to operate sampling equipment on smelter property?

ANSWER #3

Informal, oral permission is acceptable.

DISCUSSION

1. EPA's regulations prescribing national primary and secondary ambient air quality standards define "ambient air" to mean "that portion of the atmosphere, external to buildings, to which the general public has access." 40 CFR 50.1(e). That definition, in our view, limits the standards' applicability to the atmosphere outside the fence line, since "access" is the ability to enter.* In other words, areas of private property to which the owner or lessee has not restricted access by physical means such as a fence, wall, or other barrier can be trespassed upon by members of the community at large. Such persons, whether they are knowing or innocent trespassers, will be exposed to and breathe the air above the property.

2. In our telephone conversations, you have pointed out that this conclusion enables the property owner to determine what constitutes "ambient air" since he may fence his property and thereby preclude public access. This result may indicate that a property line boundary rather than a fence line boundary for ambient air makes better sense. Two factors dictate that this interpretation not be adopted: 1) the ordinary meaning of "access" includes the right or the ability to enter (see

* Webster's Third New International Dictionary (1966) defines "access" to mean "Permission, liberty, or ability to enter".

- 3 -

footnote, above); 2) any definition which limits the scope of applicability of ambient air quality standards must be examined in the light of §107 of the Clean Air Act. That section provides that "Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State..." (emphasis added).

In our view, a definition of "ambient air" that excepts fenced private property (or public lands) from the applicability of the Act is probably inconsistent with the quoted statutory language; expanding the exception beyond its current limits is clearly not legally supportable.

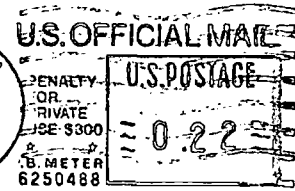
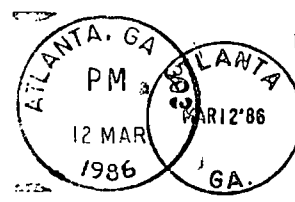
3. An argument can be made that the existing 40 CFR 50.1(a) is not inconsistent with §107 of the Act insofar as primary standards are concerned, because those standards are concerned with public health and the definition is directed at the general public's exposure to risks. This argument does not apply, however, in the case of secondary standards, which are to protect against adverse effects on "...soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility and climate" and "damage to and deterioration of property...as well as effects on economic values and on personal comfort and well being". Even assuming for the sake of argument that any of the tangible things in the quoted list may be harmed by air pollution without contravening the law if they are upon fenced private property, it is highly unlikely that adverse effects upon weather, visibility, and climate can be so restricted. In addition, it is clear that despoilation of the landscape may affect the personal well-being of many individuals in the psychic sense, even if some sort of barrier separates them from the despoilation.

4. If any problems arise regarding the activities of Federal employees upon private lands, please contact me and I will confer with our Grants and Procurement Division.

enc/cncls

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



Mr. C. H. Fancy, Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Copies
Max Linn
Peter Cunningham
David Bubb
Everyone who got)?
Copy of Pres. Det.
myself



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 20 1986

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

4APT-AC

DER

FEB 24 1986

BAQM

CERTIFIED MAIL

RETURN RECEIPT MAIL

Mr. Steve Smallwood, P.E., Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Smallwood:

On the basis of data obtained by the United States Environmental Protection Agency (EPA), EPA has found the Osceola Farms Company located in Pahokee, Florida, to be operating boiler No. 6 in violation of 40 CFR §52.21(r) - commencing construction of boiler No. 6 prior to obtaining a PSD permit and General Conditions Nos. 1-3 and Specific Condition No. 7 of the federally issued PSD permit, PSD-FL-080, dated December 4, 1981.

The above cited PSD permit, PSD-FL-080, is part of the federally promulgated Florida State Implementation (SIP) applicable to the air quality region in which the facility is located. [40 CFR §52.530(d)(2)] Therefore, Osceola Farms is also in violation of the Florida SIP.

We have notified the aforementioned facilities and are contemporaneously notifying you concerning the violations pursuant to 40 C.F.R. §52.21. For your information, a copy of the notice transmitted is enclosed herein.

Should you have any questions concerning this letter, please feel free to call me at (404) 347-3043 or Richard S. DuBoise of my staff at (404) 347-7654.

Sincerely yours,

Bruce P. Miller for

Winston A. Smith, Director
Air, Pesticides, and Toxics
Management Division

Enclosure

cc: John Brown, P.E.
Deputy Bureau Chief
Bureau of Air Quality Management



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 20 1986

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

4APT-AC

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Robert E. Jackson
Vice President and Assistant to
General Manager
Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

DER
FEB 24 1986
BAQM

Dear Mr. Jackson:

Pursuant to Section 113(a)(1) of the Clean Air Act (the Act), 42 U.S.C. §7413(a)(1), you are hereby notified that based upon information obtained by the United States Environmental Protection Agency (EPA), EPA has found the Osceola Farms Company (Osceola Farms), boiler No. 6, located in Pahokee, Florida, to be in violation of Section 165 of Act, 42 U.S.C. §7475, and regulations promulgated thereunder at 40 CFR §52.21, dealing with the Prevention of Significant Deterioration of Air Quality (PSD). Specifically, Osceola Farms is in violation of the following:

- 1) 40 CFR §52.21(r) - Source obligation; commencing construction on boiler No. 6 prior to obtaining a PSD permit.
- 2) General Condition No. 1 of the federally issued PSD permit, PSD-FL-080, dated December 4, 1981.
- 3) General Condition No. 2 of the federally issued PSD permit, PSD-FL-080, dated December 4, 1981.
- 4) General Condition No. 3 of the federally issued PSD permit, PSD-FL-080, dated December 4, 1981.
- 5) Specific Condition No. 7 of the federally issued PSD permit, PSD-FL-080, dated December 4, 1981.

The above cited December 4, 1981, permit, PSD-FL-080, is part of the federally approved and enforceable Florida State Implementation Plan (SIP) applicable to the air quality control region in which your facility is located. [40 C.F.R. §52.530(d)(2)] Therefore, Osceola Farms is also in violation of the Florida SIP.

If said violations continue or recur beyond thirty (30) days after receipt of this notification, EPA may issue an Administrative Order requiring immediate compliance in accordance with Section 113(a) of the Act, 42 U.S.C. §7413(a). If immediate compliance is not possible or if EPA determines that judicial action is appropriate, EPA may commence a civil action pursuant to Section 113(b) of the Act, 42 U.S.C. §7413(b), or criminal prosecution pursuant to Section 113(c) of the Act, 42 U.S.C. §7413(c), or both.

Furthermore, pursuant to Section 306 of the Act, 42 U.S.C. §7606, Executive Order 11738, and EPA regulations issued thereunder (40 C.F.R. Part 15), facilities to be utilized in fulfilling federal contracts, grants, and loans must be in full compliance with all standards established pursuant to the Act. A violation of the clean air standards outlined in this notification may result in Osceola Farms becoming ineligible for participation in any work associated with a federal contract, grant, or loan.

In addition to the aforementioned sanctions, any failure of the above source to achieve and/or maintain final compliance with any applicable emission limitation under the Florida SIP may subject your facility to an administratively assessed noncompliance penalty. This penalty would be assessed pursuant to the requirements of Section 120 of the Act, 42 U.S.C. §7420, and regulations promulgated pursuant thereto in 45 Fed. Reg. 50086 (July 28, 1980), 40 C.F.R. Part 66.

If you have any questions related to this notice, please feel free to contact Mr. Richard S. DuBose, Chief, Southern Compliance Section, at (404) 347-7554 or Mrs. Jewell A. Harper, Attorney, Office of Regional Counsel, at (404) 347-2335.

Sincerely yours,

Bruce P. Miller for

Winston A. Smith, Director
Air, Pesticides, and Toxics
Management Division

cc: Alfonso Fanjul, Jr., Chief Executive
FLO Sunland Corporation
316 Royal Poinciana Plaza
Palm Beach, Florida 3348

Steve Smallwood, P.E., Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation

John Brown, P.E.
Deputy Bureau Chief
Bureau of Air Quality Management

Philip R. Edwards, District Manager
South Florida District
Florida Department of Environmental Regulation

Eugene J. Sacco
Air Pollution Control Administrator
Palm Beach County Health Department



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30385

FEB 20 1986

4APT-AC

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DER

FEB 24 1986

BAQM

Mr. Robert E. Jackson, Jr.
Vice President and Assistant to
the General Manager
Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

Dear Mr. Jackson:

On October 10, 1985, the United States Environmental Protection Agency (EPA) notified the Osceola Farms Company (Osceola Farms) that boiler No. 6 had exceeded the hourly average steam load and the maximum heat input rate submitted in the May 29, 1981, application to construct a new bagasse/fuel oil boiler.

According to information submitted by the Florida Department of Environmental Regulation, it is EPA's understanding that the above referenced violations have not been corrected. Therefore, pursuant to Section 114(a) of the Clean Air Act (the Act), 42 U.S.C. §7414(a), as amended, you are hereby required to:

- 1) Submit, in tabular form, the average steam load per hour for boiler No. 6, for every hour since startup of boiler No. 6 through the date of receipt of this letter for the 1985/1986 sugar cane grinding season. In addition, provide copies of the daily steam generation charts which depict the above-referenced average steam load per hour.
- 2) Submit, in tabular form the calculated maximum heat input rate for boiler No. 6, that corresponds to each hourly average steam load, as required by Condition No. 1 of this letter. In addition, provide a sample calculation supporting the tabulated maximum heat input rates.
- 3) Or, in lieu of 1) and 2) above, state in writing that Osceola Farms is currently still exceeding the maximum heat input rate and average steam load per hour submitted in the May 29, 1981, application to construct a new bagasse/fuel oil boiler.

The information required by Conditions 1) and 2) of this letter, along with proper documentation to support the information, shall be submitted to this office no later than fourteen (14) calendar days after the date of receipt of this letter. If you decide to comply with Condition 3) in lieu of Conditions 1) and 2) of this letter, the statement in writing, as specified in Condition 3) of this letter, shall be submitted to this office no later than fourteen (14)

calendar days after receipt of this letter. In addition, any change in the information submitted must be reported no later than fourteen (14) calendar days after such change occurs. This continuing requirement to provide notification of changes in the information covered by this letter shall remain in effect unless expressly terminated in writing by this office.

Although all of the information requested herein must be submitted to EPA, you are entitled to assert a business confidentiality claim pursuant to the regulations set forth in 40 C.F.R. §2.208. If the Agency determines that the information you have designated as confidential meets the criteria in 40 C.F.R. §2.208, the information will be disclosed only to the extent and by means of the procedures specified in 40 C.F.R. Part 2, Subpart B. Unless a confidentiality claim is asserted at the time the requested information is submitted, EPA may make the information available to the public without further notice to you.

Please be advised that failure to comply with the above requirements within the specified time frames will constitute a violation of Section 114(a) of the Act and may result in the referral of this matter to the U.S. Attorney for commencement of a civil action for injunctive relief and the assessment of civil penalties pursuant to Section 113(b) of the Act.

If you have any questions concerning this letter, please feel free to contact me at (404) 347-3043 or Mr. Richard S. DuBose, Chief, Southern Compliance Section, of my staff, at (404) 347-7654.

Sincerely yours,

Bruce P. Miller for

Winston A. Smith, Director
Air, Pesticides and Toxics
Management Division

cc: See attached page

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

February 17, 1986

Mr. Alexander L. Fanjul
Vice President
Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

Dear Mr. Fanjul:

Re: File No. AC 50-112851

On January 29, 1986, you were mailed a Technical Evaluation and Preliminary Determination for the proposed increase in steam production of your No. 6 bagasse-fired boiler. Based on a review of the information submitted by your consultants, we concluded that a permit to construct could be issued if all pending enforcement action was corrected and any adverse comments received by the department were resolved.

Regulations require the department to take final action on your permit application on or before March 26, 1986.

If the enforcement action by EPA against your company cannot be resolved by that date, you may want to voluntarily extend this 90 day limit so that the department will not be forced to deny the permit. The enclosed form may be used to grant an extension of the review period.

We have been informed that a compliance test was recently conducted on this boiler. Please send a copy of the test results to the Bureau when they are available.


The department has received one critical comment from EPA on our proposed intent to issue the permit. It concerns the statement that the ambient air quality standard would not be violated at the higher steam production and emission rates. The Final Determination for the construction permit originally issued for the No. 6 boiler (AC 50-42476) predicted the maximum 24-hour ground level concentration of total suspended particulate (TSP) would be 150 ug/m^3 , which is the ambient air quality standard. Your consultant has predicted that the increase in emissions from the higher steam production will increase the 24-hour TSP ambient

Mr. Alexander L. Fanjul
Page Two
February 17, 1986

air concentration by approximately 2 ug/m^3 . Any increase in the ground level concentration will result in a violation of the 24-hour TSP ambient air quality standard and prevent the department from authorizing the higher production rate. In order to reconcile this issue, modeling will have to be done to determine the TSP increment consumption and ambient air concentration at the plant's property line and the location with the highest concentrations that the public has access to. Before the emissions are remodeled, a determination of the extent of your plant's property lines, with respect to restricted public access, must be made. Complete documentation, stating methods of restrictions of the public access, must be included with the modeling results. EPA and the department will have to accept the results of the modeling and restrictions on the public access to the property before the higher steam production rate can be authorized.

We will inform you of any future developments that threaten the issuance of the proposed permit. If you have any questions on this matter, please call Willard Hanks at (904)488-1344.

Sincerely,


C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/WH/s

cc: Peter Cunningham
David Buff
Jeff Pallas

attachment

THE PALM BEACH POST

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

PROOF OF PUBLICATION

STATE OF FLORIDA

COUNTY OF PALM BEACH

Before the undersigned authority personally appeared Barbara M. McCord who on oath says that she/he is Class. Adv. Mgr. of The Palm Beach Post, a daily and Sunday newspaper published at West Palm Beach in Palm Beach County, Florida; that the attached copy of advertising, being a Notice

in the matter of proposed agency action
in the ----- Court, was published in said newspaper in the issues of February 7, 1986

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

Barbara M. McCord

Sworn to and subscribed before me this 7 day of February A.D. 19 86

Allen M. Linton

DER
FEB 14 1986
BAQM

NO. 817539
State of Florida
Department of
Environmental Regulation
Notice of Proposed Agency
Action on Permit Application
The Department of Environmental
Regulation gives notice of its in-
tent to issue a permit to Ocala
Farms Company that will authorize
an increase in steam production of
their No. 6 boiler. This boiler is lo-
cated at the company's sugar mill
on U.S. Route 98 near Pahokee,
Palm Beach County, Florida.
Permitted steam production in this
bagasse-fired boiler will increase
from 150,000 to 185,000 lb/hr.
Emissions from the boiler will in-
crease by the following amounts.
Increase (TPV)
Particulate Matter 21.6, Sulfur Di-
oxide 39.1, Carbon Monoxide
18.9, Hydrocarbons .04.1, Nitro-
gen Oxides 13.0.
The higher emissions from this
boiler will not cause a significant
increase in the ambient air con-
centration at ground level of any
of the criteria pollutants. The boi-
ler will remain subject to the best
available control technology deter-
mination that was issued for it
when it was originally installed at
this mill.
Persons whose substantial inter-
ests are affected by the Depart-
ment's proposed permitting deci-
sion may petition for an
administrative proceeding (hearing)
in accordance with Section
120.57, Florida Statutes. The peti-
tion must conform to the require-
ments of Chapters 17-103 and 28-
5, Florida Administrative Code,
and must be filed (received) in the
Office of General Counsel of the
Department at 2600 Blair Stone
Road, Twin Towers Office Build-
ing, Tallahassee, Florida 32301,
within fourteen (14) days of publi-
cation of this notice. Failure to file
a request for hearing within this
time period constitutes a waiver of
any right such person may have to
request an administrative determi-
nation (hearing) under Section
120.57, Florida Statutes.
If a petition is filed, the adminis-
trative hearing process is designed
to formulate agency action. Ac-
cordingly, the Department's final
action may be different from the
proposed agency action. There-
fore, persons who may not wish to
file a petition may wish to inter-
vene in the proceeding. A petition
for intervention must be filed pur-
suant to Model Rule 28-5.207,
Florida Administrative Code, at
least five (5) days before the final
hearing and be filed with the hear-
ing officer if one has been as-
signed at the Division of Adminis-
trative Hearings, Department of
Administration, 2009 Apalachee
Parkway, Tallahassee, Florida
32301. If not hearing officer has
been assigned, the petition is to
be filed with the department's Of-
fice of General Counsel, 2600
Blair Stone Road, Tallahassee,
Florida 32301. Failure to petition
to intervene within the allowed
time frame constitutes a waiver of
any right such person has to re-
quest a hearing under Section
120.57, Florida Statutes.
The application is available for
public inspection during normal
business hours, 8:00 a.m. to 5:00
p.m., Monday through Friday, ex-
cept legal holidays, at:
Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301
Dept. of Environmental Regulation
2269 Bay Street
Fort Myers, Florida 33901
Palm Beach County Health Depart-
ment
901 Evernia Street
West Palm Beach, Florida 33402
Municipal Library
530 South Main Street
Belle Glade, Florida 33430
Any person may send written com-
ments on the proposed action to
Mr. Bill Thomas at the depart-
ment's Tallahassee address. All
comments mailed within 30 days
of the publication of this notice
will be considered in the depart-
ment's final determination.
Pub: The Post
February 7, 1986

P 408 533 662

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	
Mr. Alexander L. Fanjul	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
1/29/86	

PS Form 3800, Feb. 1982

UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.



PENALTY FOR PRIVATE USE, \$300

RETURN
TO **DLR**

FEB 3 1986

BAQM

Dept. of Environmental Regulation

BAQM (Name of Sender)

2600 Blair Stone Road

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

Tallahassee, FL 32301

(City, State, and ZIP Code)

Attn: Patty Adams

● **SENDER:** Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery
 2. ☐ Restricted Delivery.

3. Article Addressed to:
 Mr. Alexander L. Benjamin
 Osceola Farms Company
 Post Office Box 679
 Pahokee, Florida 33476

4. Type of Service:

- ☐ Registered ☒ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number

P 408 533 662

Always obtain signature of addressee or agent and
DATE DELIVERED.

5. Signature - Addressee

X

6. Signature - Agent

X

7. Date of Delivery

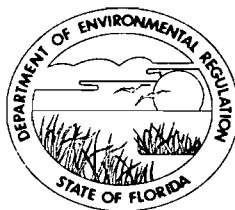
JAN 31 1986

8. Addressee's Address (ONLY if requested and fee paid)

Unit 6
Tech. Eval.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

January 28, 1986

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Alexander L. Fanjul
Vice President
Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

Dear Mr. Fanjul:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit that will authorize an increase in steam production of the No. 6 bagasse-fired boiler at your existing sugar mill in Pahokee, Palm Beach County, Florida.

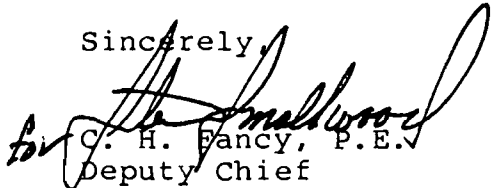
Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Palm Beach County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

The Bureau has been notified by the South Florida District office that violations of the air pollution control regulations exist at this plant. The department cannot issue a permit to increase the steam production of the boiler if it or any associated equipment is in violation of the regulations. Please be advised that the issuance of a construction permit is contingent upon your company correcting any violations and settling any enforcement action associated with this boiler and its accessory equipment.

Mr. Alexander L. Fanjul
Page Two
January 28, 1986

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,


C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Attachments

cc: Frank Kleeman
Peter Cunningham
Bruce Miller
David Knowles
Gene Sacco

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Osceola Farms Company that will authorize an increase in steam production of their No. 6 boiler. This boiler is located at the company's sugar mill on U.S. Route 98 near Pahokee, Palm Beach County, Florida.

Permitted steam production in this bagasse-fired boiler will increase from 150,000 to 185,000 lb/hr. Emissions from the boiler will increase by the following amounts.

	<u>Particulate Matter</u>	<u>Sulfur Dioxide</u>	<u>Carbon Monoxide</u>	<u>Hydro- carbons</u>	<u>Nitrogen Oxides</u>
Increase (TPY)	21.8	39.1	18.9	7.8 -84.1	13.0

The higher emissions from this boiler will not cause a significant increase in the ambient air concentration at ground level of any of the criteria pollutants. The boiler will remain subject to the best available control technology determination that was issued for it when it was originally installed at this mill.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Dept. of Environmental Regulation
2269 Bay Street
Fort Myers, Florida 33901

Palm Beach County Health Department
901 Evernia Street
West Palm Beach, Florida 33402

Municipal Library
530 South Main Street
Belle Glade, Florida 33430

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of)	
Application for Permit by:)	
)	
Osceola Farms Company)	DER File No. AC 50-112851
Post Office Box 679)	
Pahokee, Florida 33476)	

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Osceola Farms Company, applied on November 14, 1985, to the Department of Environmental Regulation for a permit to increase steam production of the No. 6 boiler at their existing sugar mill located on U.S. Route 98, Pahokee, Palm Beach County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

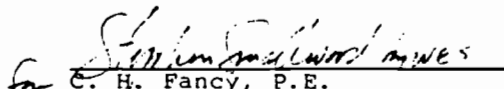
Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 29th day of January, 1986, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

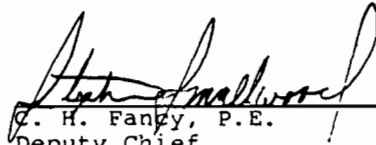
Copies furnished to:

Mr. Alexander Fanjul
Mr. Frank Kleeman
Mr. Peter Cunningham
Mr. Bruce Miller
Mr. David Knowles
Mr. Gene Sacco

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on 1/29/86, 1986.

for


C. H. Fanzy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby acknow-
ledged.

Patricia G. Adams
Clerk

1/29/86
Date

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

Technical Evaluation
and
Preliminary Determination

Osceola Farms Company
Pahokee, Florida
Palm Beach County

No. 6 Bagasse-Fired Boiler Modification
File No. AC 50-112851

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

January 28, 1986

I. APPLICATION

A. Applicant

Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

B. Request

On November 14, 1985, Mr. Alexander L. Fanjul, Vice President, submitted an application for permit to increase the steam production of the sugar mill's (SIC 2061) existing No. 6 bagasse-fired boiler. The application required for this modification was considered complete on receipt of their November 27, 1985 letter, when additional information on the proposed project was received.

C. Project and Location

Osceola Farms Company has requested permission to increase the steam production of their No. 6 boiler from 150,000 to 185,000 lb/hr by burning more bagasse and oil than they are currently allowed to do by the permits that have been issued for this source. No physical modifications to the No. 6 boiler and scrubber are needed to operate at the higher steam production rate. The application to increase steam production also includes a reduction in the days per season the boiler will operate. The No. 6 boiler is located at the existing sugar mill on U.S. Route 98 near Pahokee, Palm Beach County, Florida. The UTM coordinates of this site are zone 17, 544.2 km E and 2968.0 km N.

D. Air Pollutant Emissions

Emissions from the No. 6 boiler are controlled by a modified Joy Turbulaire impingement scrubber, low sulfur fuel oil, and good operating practices. The emission standards were established by a best available control technology (BACT) determination and a lowest achievable emission rate (LAER) determination when Osceola Farms Company was originally issued a permit to construct (AC 50-43777) the No. 6 boiler. Specific Condition No. 10 of Construction Permit No. AC 50-43777 that allowed the installation of this boiler at this plant authorized the reduction in the allowable VOC emissions based on actual test data obtained from a bagasse-fired boiler. The permitted emissions from this boiler at the present and proposed steam production rates and days per season operation are shown in Table 1.

Table I

Pollutant	Present Production (a)		Proposed Production (b)		Change	
	max. lb/hr(c)	TPY	max. lb/hr(d)	TPY	lb/hr	TPY
Particulate Matter (e)	44.3	81.1	54.6	102.9	+10.3	+21.8
Sulfur Dioxide(f)	150.9	311.5	186.1	350.6	+35.2	+39.1
Carbon Monoxide(e)	73.3	151.4	90.4	170.3	+17.1	+18.9
Hydrocarbon(e)	73.3	151.4	35.7(g)	67.3	-37.6	-84.1
Nitrogen Oxides(f)	50.3	103.8	62.0	116.8	+11.7	+13.0

(a) 172 days/season maximum allowed operation

(b) 157 days/season maximum allowed operation

(c) 150,000 lb/hr maximum hourly steam production allowed

(d) 185,000 lb/hr maximum daily average steam produced allowed

(e) Boiler using 100 percent bagasse fuel

(f) Boiler using bagasse with No. 6 oil as supplementary fuel

(g) Allowable hydrocarbon emissions are reduced to the potential VOC emissions as specified in Specific Condition No. 10 of permit No. AC 50-43777.

II. RULE APPLICABILITY

A. State Regulations

The proposed project, increasing the steam production from an existing carbonaceous fuel fired boiler (No. 6 oil supplementary fuel) located at a sugar mill, is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code.

The affected boiler is located in an area designated nonattainment for ozone (Rule 17-2.410, FAC), and attainment for the other criteria pollutants (17-2.420).

Sugar mills, which are chemical process plants, are listed in Table 500-2, Major Facility Categories (list of 28). The sugar mill is a major facility (17-2.100) because the emissions of particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), volatile organic compounds (VOC), and nitric oxides (NO_x) exceed 100 TPY for each of these criteria pollutants. However, the increase in emissions resulting from the proposed project are less than the significant emission rates listed in Table 500-2, Regulated Air Pollutants-Significant Emission Rates.

The project is not subject to the prevention of significant deterioration regulations (17-2.500) and new source review for nonattainment areas (17-2.510) because the modification does not result in a significant emission increase of any criteria pollutant (17-2.500(2)(d)4.a(ii) and 17-2.510(2)(d)4.a.).

The project will be reviewed under Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements. Allowable emissions will be based on the best available control technology (BACT) determination issued for this source when it was originally constructed by the applicant, the revised lowest achievable emission rate (LAER) determination, and the emissions currently being proposed by the applicant. Higher emissions could subject this modification to review under other regulations.

B. Federal Regulations

The proposed project, a minor modification to a major source, is not subject to review under federal regulations because the modification will not result in a significant net emissions increase of any criteria pollutant. The permit the state proposes to issue in response to the applicant's request will succeed the federal permit (PSD-FL-080) that was originally issued to Osceola Farms Company for this boiler although any condition in the federal permit that is not modified by the state permit will remain in effect and be enforceable by the regulatory agencies.

III. Technical Evaluation

The emission standards in the initial permit to construct (AC 50-43777) that was issued for the No. 6 boiler and Joy Turbulaire impingement type scrubber were based on BACT and LAER determinations. A BACT determination addressed all criteria pollutants except VOC. The VOC standard was established by a LAER determination. A reliable VOC emissions factor for bagasse boilers was not available when the initial application to construct this boiler was processed. Based on the estimated emissions in the original application, it was necessary to assign 151.4 TPY new source allowance for VOC to this source. The department believed the VOC emission factor used by the applicant was high and, as a condition of the original construction permit (Specific Condition No. 10 of permit No. AC 50-43777), required any excess VOC new source allowance be returned to Palm Beach County. Actual test data on a bagasse-fired boiler shows the VOC emissions are approximately 0.10 lb/million Btu heat input. The LAER determination for this boiler is revised to this emission factor. The VOC emissions from this boiler, after the proposed modification, will be 67.3 TPY. The difference between this emission standard and the original standard is 84.1 TPY VOC and this amount is returned to the new source allowance for Palm Beach County. The maximum allowable emission rates from Table II and Specific Condition No. 2 of construction permit No. AC 50-43777 for this source are shown in the following table.

Table II

Pollutant	lb/MMBtu	lb/hr
PM	0.15	44.3
SO ₂	0.49	150.9
CO	0.27	73.3
VOC	0.27	73.3
NOx	0.16	50.2

A recent BACT determination for a bagasse-fired boiler that has been issued since the No. 6 boiler was initially permitted was more restrictive than the BACT for boiler No. 6. The original emission rate standards (lb/MMBtu) will not be relaxed in any permit revisions for this boiler. More details on the evaluation that established the original emission standards are in the October 28, 1981, Final Determination for this boiler that is on file in the department's office in Ft. Myers and the Palm Beach County Health Department in West Palm Beach.

IV. AIR QUALITY ANALYSIS

The proposed modification will not result in a significant net emission increase as set forth in Rule 17-2.500(2)(e)2., FAC. Therefore, no air quality analysis is required by the regulations. After the proposed modification, boiler No. 6 will consume up to 91 percent of the allowable sulfur dioxide increment (24-hour) and 56 percent of the allowable particulate matter increment (24-hour). Based on previous analyses, the department has reasonable assurance that the modification will not violate any air quality standard or PSD increment.

V. CONCLUSION

Based on the data submitted by Osceola Farms Company, the department has concluded that the emissions from the No. 6 boiler can comply with the state and federal regulations at the higher steam production rate if the boiler and scrubber are operated and maintained properly. However, both the federal and state regulatory agencies have data that indicates the current emissions from the No. 6 boiler and bagasse feed system are in violation of the air pollution control regulations. If these violations can be resolved promptly, the department proposes to issue a construction permit that will authorize an increase in the steam production of the No. 6 boiler. The General and Specific Conditions in the proposed permit (draft attached) will assure compliance of the modified source with the air pollution control regulations.

If the applicant is unable to correct the violations and resolve the enforcement action on the No. 6 boiler, the final determination by the department will be to deny the application for permit to construct.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Osceola Farms Company
Post Office Box 679
Pahokee, Florida 33476

Permit Number: AC 50-112851
Expiration Date: June 30, 1986
County: Palm Beach
Latitude/Longitude: 26° 49' 45"N
80° 33' 00"W
Project: No. 6 Boiler Modifications

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 steam production in the existing No. 6 bagasse-fired (No. 6 oil supplementary fuel) boiler which is equipped with an impingement type scrubber, from 150,000 to 185,000 lbs of 240 psig/550°F steam per hour. The No. 6 boiler is located at Osceola Farms Company's existing sugar mill that is approximately 6 miles northeast of Pahokee, Palm Beach County, Florida, on U.S. Route 98. The UTM coordinates of the proposed plant are zone 17, 544.2 km E and 2968.0 km N.

The modification shall be in accordance with the attached permit application, plans, documents, and drawing except as noted in the specific conditions of this permit.

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER form 17-1.202(1), received November 14, 1985.
2. November 27, 1985, Hopping, Boyd, Green and Sam's letter.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1986

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.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1986

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.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1986

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.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1986

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 shall not exceed 185,000 lb/hr (1 hr/avg) of 240 psig and 550°F steam. Steam with a higher enthalpy shall not be produced by this boiler without prior approval of the department. The boiler shall be equipped with an instrument to continuously record steam production. Steam production records shall be kept for a minimum of 5 years.

2. Heat input to this boiler shall not exceed 357 million Btu per hour as determined by an energy balance that assumes the boiler is 55 percent efficient. Approximately 50 TPH of wet bagasse will produce 357 million Btu per hour.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

3. Heat input from No. 6 residual oil to this boiler shall not exceed 9.8 million Btu per hour. Approximately 65 gallons per hour of No. 6 oil will produce 9.8 million Btu per hour. The fuel oil system shall be equipped with an intergrating fuel oil flow meter or continuous recorder to measure the amount of fuel oil consumed by the boiler. The measuring device shall be calibrated annually by a method approved by the department. The Company shall meter daily oil consumption by other boilers and the No. 6 boiler, separately. The total quantity of fuel oil consumed on a daily basis by the No. 6 boiler shall be replaced by the addition to the fuel system of an equal or greater amount of 1.0 percent or less sulfur fuel oil within 72 hours (excluding weekends). Sulfur content of the fuel oil purchased for boilers 2, 4, and 5 shall not exceed 2.4 percent. Oil records shall be retained for 5 years. Operating permits for boilers 2, 4, and 5 shall be amended to reflect burning of the blended oil. The total fuel oil consumption for all existing and proposed boilers shall not exceed 10,000 gallons on a daily basis.

4. The maximum allowable emissions from the No. 6 boiler shall be as follows:

Pollutant	Max. Emission Rate (lb/10 ⁶ Btu)	Max. Emissions (lb/hr)
Particulate Matter	0.15 (bagasse) 0.1 (fuel oil)	54.6
Sulfur Dioxide	0.29 (bagasse) 2.6 (fuel oil)	186.1
Nitrogen Oxides	0.16 (bagasse) 0.40 (fuel oil)	62.0
Volatile Organic Compounds	0.10 (bagasse) 0.002 (fuel oil)	35.7
Carbon Monoxide	0.27 (bagasse) 0.007 (fuel oil)	90.4
Visible Emissions	20% Opacity (6 minute average except 40% opacity allowed for 2 minutes/hour)	

Compliance with the standards shall be determined by EPA Reference Methods 1, 2, 3, 4, 5, 6, 7, 9, 10 and 25 as described in 40 CFR 60, Appendix A.

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

5. Visible emissions from the bagasse handling system shall not exceed 10 percent opacity over any 6 minute period as measured by EPA Reference Method 9.

6. Any No. 6 fuel oil burned in the No. 6 boiler shall contain no more than 2.4 percent sulfur. Boiler No. 1 shall be put in a normal standby condition while all of the other boilers are in operation. Boiler No. 1 can be operated to produce steam when one of the other boilers is not operating.

7. The scrubber shall be equipped with a manometer or equivalent instrument to measure the total pressure drop of the flue gas stream across the scrubber, with pressure gauges to measure the water pressure at the spray nozzles, and with a flow meter or equivalent device (weir) to measure the quantity of water circulating through the scrubber. The pH of the scrubber water at the scrubber inlet and outlet shall also be measured. Data from these instruments shall be recorded each shift (every 8 hours) and available to regulatory agencies for 5 years. During compliance tests, these parameters shall be recorded every 15 minutes. The boiler shall not be operated if the pressure drop across the scrubber is less than 7 inches of water, the pressure on the spray nozzles is less than 30 psig, and the flow through the scrubber is less than 300 GPM. These parameters may be increased in the future if higher values are needed to assure compliance.

8. Prior to the expiration of this construction permit, a test shall be made on the No. 6 boiler to determine its actual thermal efficiency in accordance with the ASME short-form procedure. This test must be repeated each time the permit to operate this boiler is renewed (every 5 years). The tests shall be done while the tubes are clean and within 14 days of the compliance tests. A current report on the thermal efficiency test must be included with the application for permit to operate this boiler.

9. Compliance with all emission standards for the No. 6 boiler, except particulate matter and visible emissions, may be based on an emission factors established by previous EPA reference method tests on this boiler. As a condition of this construction permit, particulate matter and visible emissions tests shall be conducted concurrently on the boiler while it is operating at its maximum or permitted capacity, whichever is lower. A volatile organic compounds test will also be conducted on the boiler. Any permit to operate issued for this boiler will restrict production to the quantity that

PERMITTEE:
Osceola Farms Company

Permit Number: AC 50-112851
Expiration Date: June 30, 1986

SPECIFIC CONDITIONS:

existed during the compliance tests. The compliance tests results shall be calculated by assuming the thermal efficiency of the boiler is 55 percent, or by any new method subsequently adopted by department rule. For information purposes only, the particulate matter emission rate shall also be calculated by utilizing both the F factor and the actual boiler efficiency as determined by the latest ASME boiler efficiency test. The scrubber parameters listed in Specific Condition No. 7 that existed during the compliance test shall be included in the tests report. The South Florida District office shall be notified 15 days prior to any compliance test.

10. After the initial reference method tests that showed compliance with the allowable emission standards for this boiler, the company may substitute an Operation and Maintenance plan that is approved by the department that optimizes the NO_x, CO, SO₂, and VOC emissions for the compliance tests specified in Specific Conditions Nos. 4 and 9.

11. The permittee will demonstrate compliance with the conditions of this construction permit and submit a complete application for permit to operate to the South Florida District office at least 90 days prior to the June 30, 1986, expiration date of this construction permit or 60 days after the No. 6 boiler reaches its maximum or permitted steam production rate, whichever date occurs first. A copy of the initial emission tests report for all regulated air pollutants shall be sent to the Bureau of Air Quality Management. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration date. Commercial operation of this boiler is not authorized unless it is in compliance with all conditions in the applicable permits.

12. Any permit to operate issued for the No. 6 boiler shall limit its operations to 157 days per season and the steam production capacity to that which existed during the Reference Method 5 test, require (as a minimum) annual particulate matter and visible emissions tests, and an annual operation report which includes the quantity of oil burned in this boiler during the season and sulfur content of the replacement oil purchased.

Issued this _____ day of _____, 19__

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

Lowest Achievable Emission Rate (LAER) Determination

Osceola Farms Company

Palm Beach County

Osceola Farms Company was issued permit No. AC 50-43777 dated November 12, 1981, to construct the No. 6 bagasse-fired (No. 6 oil supplementary fuel) boiler. The No. 6 boiler is located in an area classified nonattainment for the pollutant ozone (Rule 17-2.410(1), FAC). Hydrocarbons or volatile organic compounds (VOC) emissions from the combustion of the fuels are subject to a LAER determination (17.2.510(4)(a)).

The applicant proposed the hydrocarbons (VOC) emission limit based on an emission factor of 2 lb VOC/ton of bagasse burned that was listed in the Source Classification Code (SCC) in the National Emission Data System. The department had reasonable doubt concerning the accuracy of this VOC emission factor.

The August 17, 1981, LAER for the No. 6 boiler was determined to be the documentation of a VOC emission factor when burning bagasse as boiler fuel. The VOC emission factor of 2 pounds per ton bagasse burned, in the interim, was determined as LAER. The LAER stated that once the VOC emission factor from burning bagasse was documented, the LAER determination would be reviewed.

On March 21, 1983, VOC emissions were measured from a bagasse-fired boiler by a Reference Method 25 test. Test results from similar units elsewhere indicate the actual VOC emissions to be approximately 0.10 lb per million Btu heat input. This is the basis for the revised LAER determination. As more VOC test data becomes available, a more reliable emission factor will be developed and used for future permitting of bagasse-fired boilers.

Revised LAER Determination

<u>Pollutant</u>	<u>Emission Limit</u>	<u>Test Method</u>
VOC	0.10 lb/10 ⁶ Btu heat input	EPA Method 25

Details of the Analysis May be Obtained by Contacting:

Willard Hanks, Review Engineer
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Recommended by:

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

Date _____

Approved by:

Victoria J. Tschinkel, Secretary

Date _____



DTB:RRH:ar
90-5-2-1-870

U.S. Department of Justice

Mary Smallwood
pls hand

DEPT

JAN 21 1986

BAOM

Washington, D.C. 20530

January 15, 1986

Honorable Victoria J. Tschinkel
Secretary
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

RECEIVED
JAN 20 1986

Office of the Secretary

Re: United States v. Osceola Farms Co., Inc.
(S.D. Fla.)

Dear Ms. Tschinkel:

This is to inform you, pursuant to Section 113(b) of the Clean Air Act, that the United States, acting on behalf of the Environmental Protection Agency (EPA), has filed a civil action against the Osceola Farms Company, Inc., located in Pahokee, Florida. The Complaint alleges that Osceola Farms has operated its Boiler No. 6 in violation of emission limitations set forth in its Prevention of Significant Deterioration (PSD) permit.

Please be advised that Osceola Farms intends to conduct a performance test at Boiler No. 6 on January 23-24. We will keep you informed concerning the results of that test and the progress of our enforcement action.

I apologize for the delay in providing this notice. If you would like to discuss any aspect of this case, please call me at (202) 633-1307.

Sincerely,

Assistant Attorney General
Land and Natural Resources Division

By: *Robert R. Homiak*
Robert R. Homiak, Attorney
Environmental Enforcement Section

cc: Jewell Harper, Esq.
EPA Reg. Iv

Judy Katz, Esq.
OECM-Air
EPA-HQ

1/8/86

SOURCE COMPLIANCE ACTIVITY REPORT

TYPE OF VIOLATOR: Static Significant Violator

NAME: Osceola Farms Company

LOCATION: Pahokee, Florida

COUNTY: Palm Beach County

ATTAINMENT STATUS: Attainment for Particulates

CDS #: 3420-60019

CLASS: Al-A STOMPD: T

PLLT. IN VIOLATION: Particulates

POINT(S) IN VIOLATION: PSD boiler No. 6

REGULATION IN VIOLATION: PSD-FL-080

DATE OF VIOLATION: 12/22/82 12/11/84
1/9/84 2/14/85

HOW VIOLATION DETERMINED: Particulate Test DATE REPORTED TO EPA: 3/84

DATE OF ST. NOV: None issued

DATE OF EPA NOV: 4/18/84

DAY 0: None Set

DAY 90:

DAY 120:

CALL
DATE

ACTIVITY STATUS

- | | |
|----------|--|
| 10/26/84 | ◦ No determination was made as to who is the lead agency. |
| 10/26/84 | ◦ Bert Cole indicated that EPA must determine by November 16, 1984, the lead agency for each significant violator and the projected date that the lead agency will resolve the compliance issue. |
| 11/16/84 | ◦ Florida DER does not feel they can go back on a Consent Order/ Permit that was issued to the company. As a result, EPA should take the enforcement lead on this case. |
| 11/16/84 | ◦ Mr. Voshell stated that EPA would inform the DER prior to any enforcement action by the agency. |
| 3/14/85 | ◦ Rick Vail indicated that Osceola failed a source test conducted by DER on February 14, 1985, on PSD boiler No. 6. |
| 3/14/85 | ◦ According to Rick Vail, DER will submit the results of the aforementioned source test to EPA when the South Florida District Office reports Osceola in violation. |
| 4/18/85 | ◦ As mentioned in the November conference call, EPA will assume the enforcement lead. |
| 4/18/85 | ◦ Jeff Pallas indicated that EPA was preparing to issue a §114 letter to Osceola farms to acquire calculated boiler efficiencies for all boilers and that EPA would contact DER before issuance. |
| 5/20/85 | ◦ EPA has assumed the enforcement lead (concurred with DER in the April 1985 conference call). |
| 5/20/85 | ◦ Jeff Pallas indicated that EPA is preparing a joint Section 114/Show Cause letter to Osceola Farms. The show cause conference is tentatively scheduled for June 12, 1985, at |

Visible Emission Form

Source Name OSCEOLA FARMS COMPANY Observer MIRZA P. BAIG
 Address HWY 98 PAHOKEE FL Date 12-11-1985
 Point Description BAGASSE STORAGE/UNLOADING Permit No. A0-50-79267
 Time Observation Began 1:55 PM Ended 2:07 PM

A) Observer Location:

1) Distance from stack (ft.)

~ 50 FT.

2) Direction from stack

S.W.

B) Meteorological Conditions:

1) Wind Speed (mph)

10-15 mph

2) Wind Direction

Variable; At times From S.E.

3) Sky Condition

40% Cloud Cover

C) Plume Description:

1) Color Brown Bagasse Dust2) Distance Visible (ft) ~ 50'3) Steam Plume (Yes/No) N/A.

D) Summary of Results

1) Average Opacity 43.6 %2) Readings range from 35%to 50%3) Opacity exceeded 10%for 12 mins 0 secs.4) Source ~~was~~/was not in compliance at the time evaluation was made

5) Applicable Regulation:

SPECIFIC CONDITION NO: 5

E)

1) Process Input Rate Normal operation2) Operating Parameters Boiler #6 producing ~165,000 #/HR Steam.

	0	15	30	45		0	15	30	45
0					30				
1	45	50	50	50	31				
2	40	40	45	50	32				
3	45	45	50	50	33				
4	40	40	45	40	34				
5	40	45	45	40	35				
6	40	45	45	40	36				
7	35	40	40	45	37				
8	40	45	40	45	38				
9	50	50	45	45	39				
10	40	40	45	45	40				
11	40	40	45	40	41				
12	40	45	50	40	42				
13					43				
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27					57				
28					58				
29					59				

DER Observer Signature Mirza P. BaigDate Certified: September 1985Expiration Date March 15, 1986

JAN 08 1986

BAQM

CITY OSCEOLA FARMS COMPANY		DISTRICT SOUTH FLORIDA	COUNTY PALM BEACH
ADDRESS P.O. Box 679 PAHOKEE, FL 33476		CONTACT MR BOB JACKSON MR. FARINAS	
APIS # 52/50/0019/06	PERMIT # A050-79267	EXPIRATION DATE MAY 1, 1985	
SOURCE DESCRIPTION BOILER #6			
INSPECTION DATE 12-11-85	AUDIT TYPE II	COMPLIANCE STATUS UNSATISFACTORY	
INSPECTION COMMENTS/RECOMMENDATIONS			
<p><u>STEAM PRODUCTION RATES WERE AS FOLLOWS:</u></p> <p>BOILER #1 → DOWN; BOILER #2 → 150,000 #/HR. BOILER #3 → DOWN; BOILER #4 → 150,000 #/HR. BOILER #5 → 150,000 #/HR AND BOILER #6 → AVG. 150,000 #/HR WITH PEAKS OF 165,000 #/HR FROM 9⁰⁰ AM TO 10⁰⁰ AM AND FROM 10⁴⁵ AM TO 12⁰⁰ NOON</p> <p><u>SCRUBBER PRESSURE DROP WERE AS FOLLOWS:</u></p> <p>BOILER #2 → 6.1"(N) AND 6.0"(S); BOILER #4 → NON-FUNCTIONAL BOILER #5 → 4.9"(E) AND 7.1"(W); BOILER #6 → 10.2".</p> <p>THIS MILL GENERALLY HAS A SLOPPY MAINTENANCE PRACTICE. I RECOMMEND STRONG ENFORCEMENT ACTION IMMEDIATELY TO GET THIS SOURCE INTO COMPLIANCE.</p>			
INSPECTOR(S) NAME(S) MURZA P. BAIG			
SIGNATURE(S) <i>Murza P. Baig</i>		DATE 1-6-1986.	

DER

JAN 08 1986

BAOM

JAN 08 1986

CITY OSCEOLA FARMS COMPANY		DISTRICT SOUTH FLORIDA	COUNTY PALM BEACH	BAQM
ADDRESS P.O. BOX 679 PANHOKEE, FL 33476		CONTACT MR. FARINAS MR. BOB JACKSON; MR. HERMIDA		
APIS # 52/50/0019/06	PERMIT # AD-50-79267	EXPIRATION DATE MAY 1, 1989		
SOURCE DESCRIPTION BOILER # 6.				
INSPECTION DATE 12-11-1985	AUDIT TYPE II	COMPLIANCE STATUS UNSATISFACTORY.		
INSPECTION COMMENTS/RECOMMENDATIONS				
<p>MR. BILL ARLINGTON WAS STACK TESTING BOILER # 5 AT THE TIME OF INSPECTION.</p> <p>① EXCESS BAGASSE STORAGE/UNLOADING OPERATION WAS EXTREMELY DUSTY. SEE ATTACHED V.E. REPORT. THEY ARE ALLOWED 10% OPACITY AND 12-MINUTE ACTUAL OPACITY WAS <u>43.6</u>.</p> <p>② EXCESSIVE FUGITIVE EMISSIONS FROM BOILER #6 FURNACE (FROM DIFFERENT LEVELS) OF UP TO 70% (SMOKE) OPACITY WAS OBSERVED FOR ATLEAST 2 HOURS.</p> <p>③ IT WAS UNSAFE TO WALK AROUND BOILER # 5, #4, #3 AND #2 SCRUBBERS TO OBTAIN MANOMETER READINGS. I HAVE SLIPPED AND FELL DOWN SEVERAL TIMES IN THE PAST. THIS WAS BROUGHT TO MR. FANJUL'S ATTENTION MANY TIMES, BUT NOTHING HAS BEEN DONE TO CORRECT THIS PROBLEM TO DATE.</p> <p>④ STACK TESTING PLATFORMS ON BOILERS # 2, 3, 4, 5 ARE INADEQUATE/UNSAFE WHEN CONDUCTING STACK TESTS. THEY ARE ONLY 27" WIDE. THEY SHOULD BE ATLEAST 36" WIDE AS PER 17-2.700(4)(C)2.a.</p> <p>⑤ BOILERS NO: 3 AND NO. 5 SCRUBBERS HAVE NO SAFETY CAGES OR FALL ARRESTORS ON PORTIONS OF THE LADDER ON THEIR SCRUBBERS. VIOLATION OF 17-2.700(4) C.3.a.</p>				
INSPECTOR(S) NAME(S) MIRZA P. BAIG				
SIGNATURE(S) <i>Mirza P. Baig</i>		DATE 12-27-85		

DER

DEC 02 1985

ROOM

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
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PETER C. CUNNINGHAM
WILLIAM H. GREEN
WADE L. HOPPING
RICHARD D. MELSON
WILLIAM D. PRESTON
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JAMES S. ALVES
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
RICHARD S. BRIGHTMAN
FRANK E. MATTHEWS
STEVEN A. MEDINA
CAROLYN S. RAEPPEL

OF COUNSEL
W. ROBERT FOKES

November 27, 1985

BY HAND DELIVERY

Willard Hanks
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Re: Osceola Farms Company
Amendment of Boiler No. 6 Air Permits
(Nos. AC50-4377 and AO50-79267)

Dear Willard:

On behalf of Osceola Farms Company, I would like to thank you and Max Linn for taking the time to meet with Bob Jackson, Frank Kleeman and me regarding Osceola's application for amendment of the referenced permits. In response to questions that you raised at our meeting and in your subsequent telephone conversation with Mr. Kleeman, I have attached the following items:


1. Revised page 4 of the permit application form to address your concern regarding the "allowable emission" figure for particulate matter in Section III.C. (Attachment "A")
2. Memorandum from J. H. Farinas to Bob Jackson to address your question about changes to the Boiler No. 6 scrubber (with up-to-date drawings of the scrubber) and to specify the desired steam temperature (520° ± 30° F) and pressure (210 PSIG ± 30 PSIG) for Boiler No. 6. (Attachment "B")
3. Answers to your questions concerning: (1) the reason for Osceola's request to increase the permitted steam production capacity for Boiler No. 6; and (2) the pressure drop for the Boiler No. 6 scrubber. (Attachment "C")

Willard Hanks
November 27, 1985
Page 2

I hope that this information satisfactorily answers your questions regarding Osceola's request for amendment of the Boiler No. 6 air permits. Please do not hesitate to call if you need anything further.

Your cooperation in this matter is much appreciated.

Sincerely,



Peter C. Cunningham

PCC/gb

cc: Clair Fancy✓
Bob Jackson
Frank Kleeman

Attachments

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Bagasse	S	0.02	97,400	A
Fuel Oil #6	S	1.0	237	B

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 97,637

2. Product Weight (lbs/hr): 185,000 Steam

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/xxhr	T/yr	
Particulates	54.6	102.9	0.2 lb/mmBtu ⁵	54.6 ⁵	789.5	1487.4	E
SO ₂	186.1	350.6	Permit Cond ⁶	186.1	206.6	389.2	E
CO	90.4	170.3	" "	90.4	90.4	170.3	E
VOC	90.4	170.3	" "	90.4	90.4	170.3	E
NO _x	62.0	116.8	" "	62.0	62.0	116.8	E

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

⁵BACT limit to remain at .15 lb/mmBtu, which is equivalent to 54.6 lb/hr.

⁶Reflects presently permitted emission rate (lb/hr) with increased capacity to 185,000 pounds per hour of steam.

OSCEOLA FARMS, CO.

MEMORANDUM

TO: Bob Jackson

FROM: J. H. Farinas

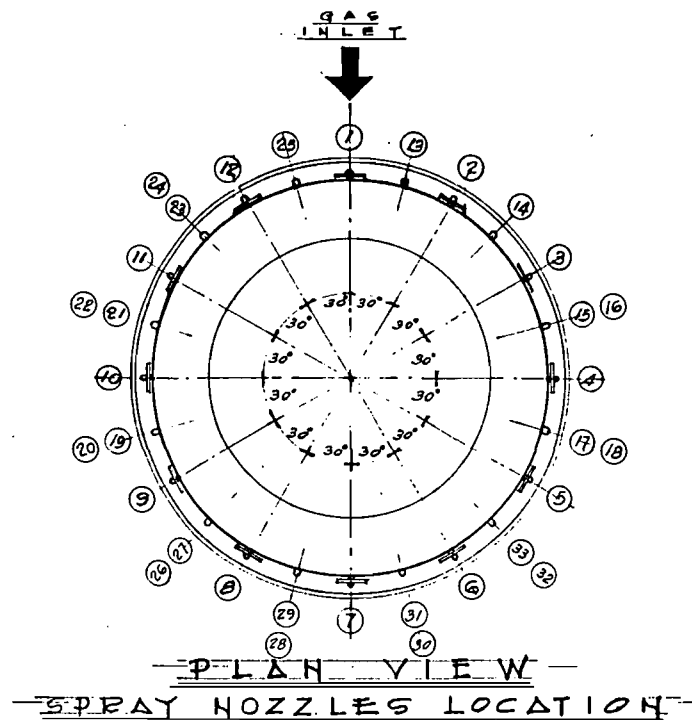
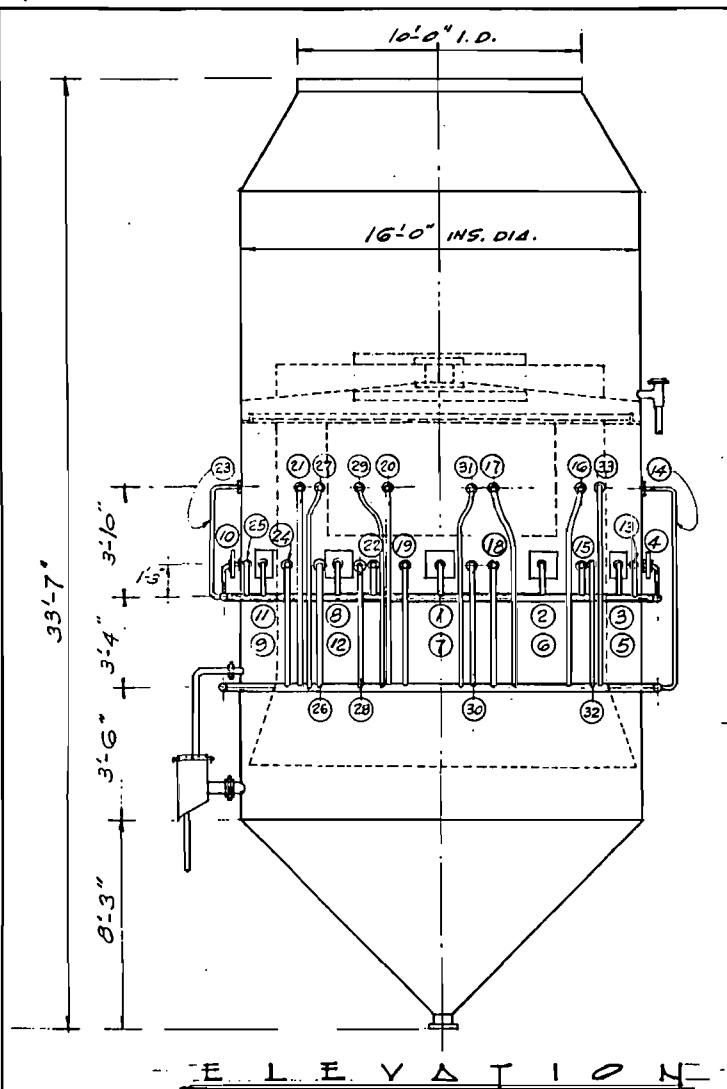
SCRUBBER FOR BOILER No. 6
SUBJECT: MODIFICATIONS AND TEMPERATURE DATE: Nov. 15, 1985
AND PRESSURE RANGE FOR
185,000 Lbs/Hr. STEAM.

Attached are two sketches of the mentioned scrubber showing original spray nozzles, and 11 additional installed for 1984-85, which are:

1. Add three (3) spray nozzles of 15 gpm.each, spaced as shown in the gas inlet duct, to start cooling the gases as they enter the scrubber. As the temperature of the gases decreases, so does the is volume, thus making the scrubber more efficient due to the lower velocities of the gases and also the additions of 8 more nozzles.

We feel that the most desireable operating range for the steam temperature and pressure of boiler number 6 at 185,000 Lbs/Hr. should be:

1. Temperature $520^{\circ}\text{F} \pm 30^{\circ}\text{F}$
2. Pressure $210 \text{ PSIG} \pm 30 \text{ PSIG.}$



NOTE: -
 ORIGINAL SPRAY NOZZLES: ① TO ⑫
 ADDITIONAL SPRAY NOZZLES: ⑬ TO ⑳
 TOTAL SPRAY NOZZLES 1984-85: 25
 1985-86 NEW SPRAY NOZZLES: ㉑ TO ㉓
 TOTAL SPRAY NOZZLES 1985-86: 36

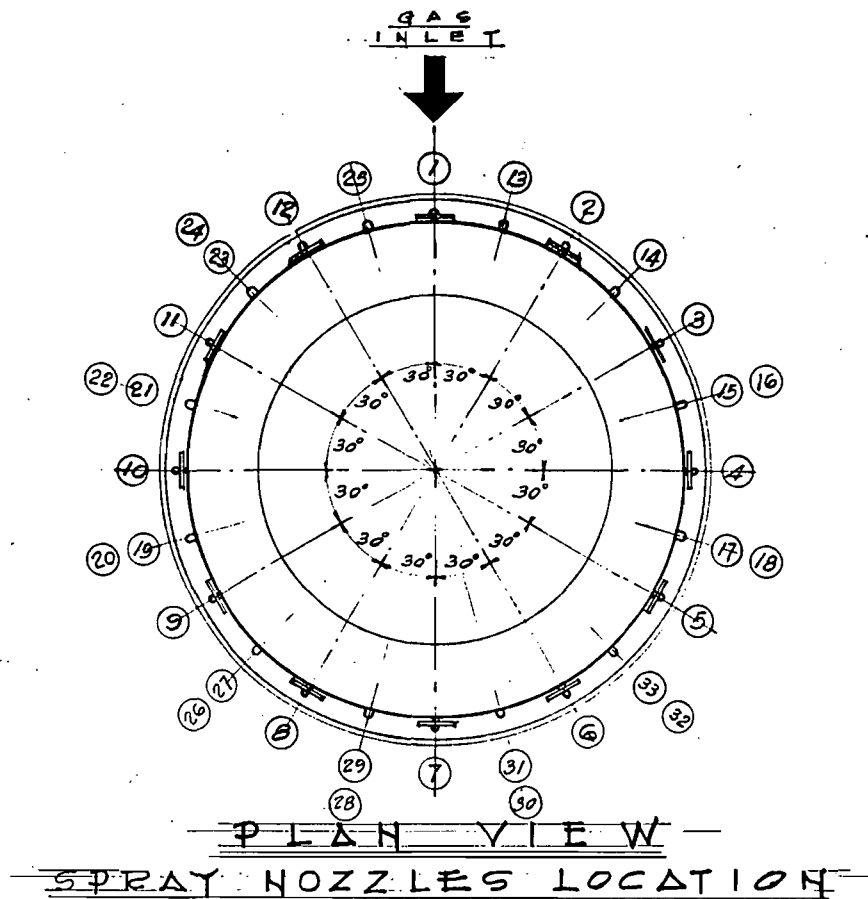
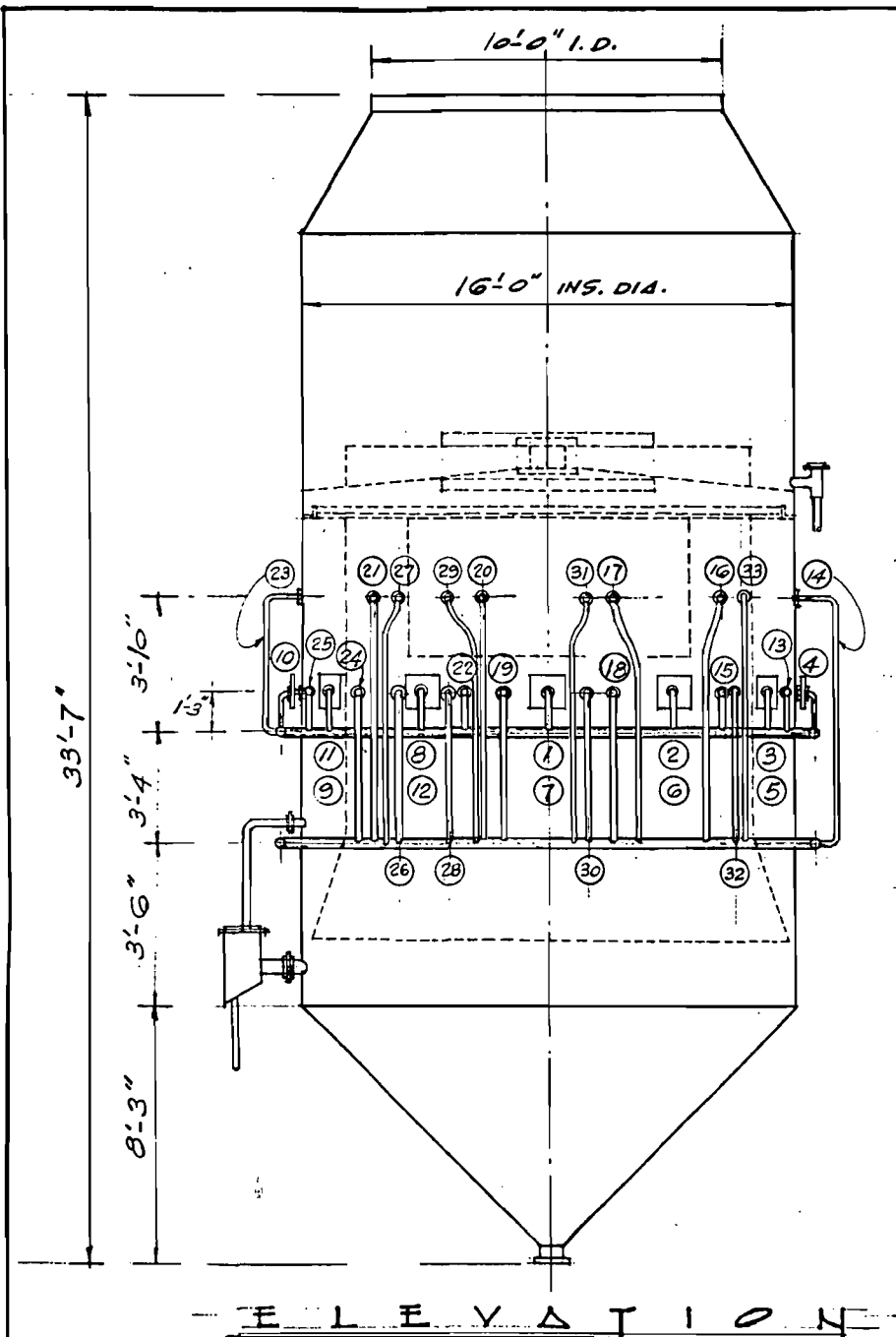
OSCEOLA FARMS COMPANY SUGAR FACTORY		
BOILER No. 6 SCRUBBER (No. 1)		
SCALE: N.T.S.	DRAWN BY: A. APARICIO	DRAWING No.
DATE: NOV. 16-1985	REVISED: J. H. FARIÑAS	3-1350

1. Reason for increased steam production capacity:

The nominal maximum steam production capacity of 150,000 pounds per hour indicated for Boiler No. 6 when it was originally permitted was based on an assumed bagasse moisture content of 56 percent. The moisture content of the bagasse now being burned in Boiler No. 6 is approximately 50 percent. The boiler is capable of producing 185,000 pounds of steam per hour with this lower fuel moisture content. The increased steam production capacity for Boiler No. 6 will give Osceola more flexibility in meeting the total steam production capacity for the entire plant. The lower fuel moisture content also allows for more complete combustion, which should produce a lower particulate emission rate in terms of pounds per million Btu heat input.

2. Scrubber pressure drop:

The Boiler No. 6 scrubber operates over a range of pressure drops. A representative ΔP range would be 10 inches \pm 3 inches.



NOTES:

ORIGINAL SPRAY NOZZLES: ① TO ⑫

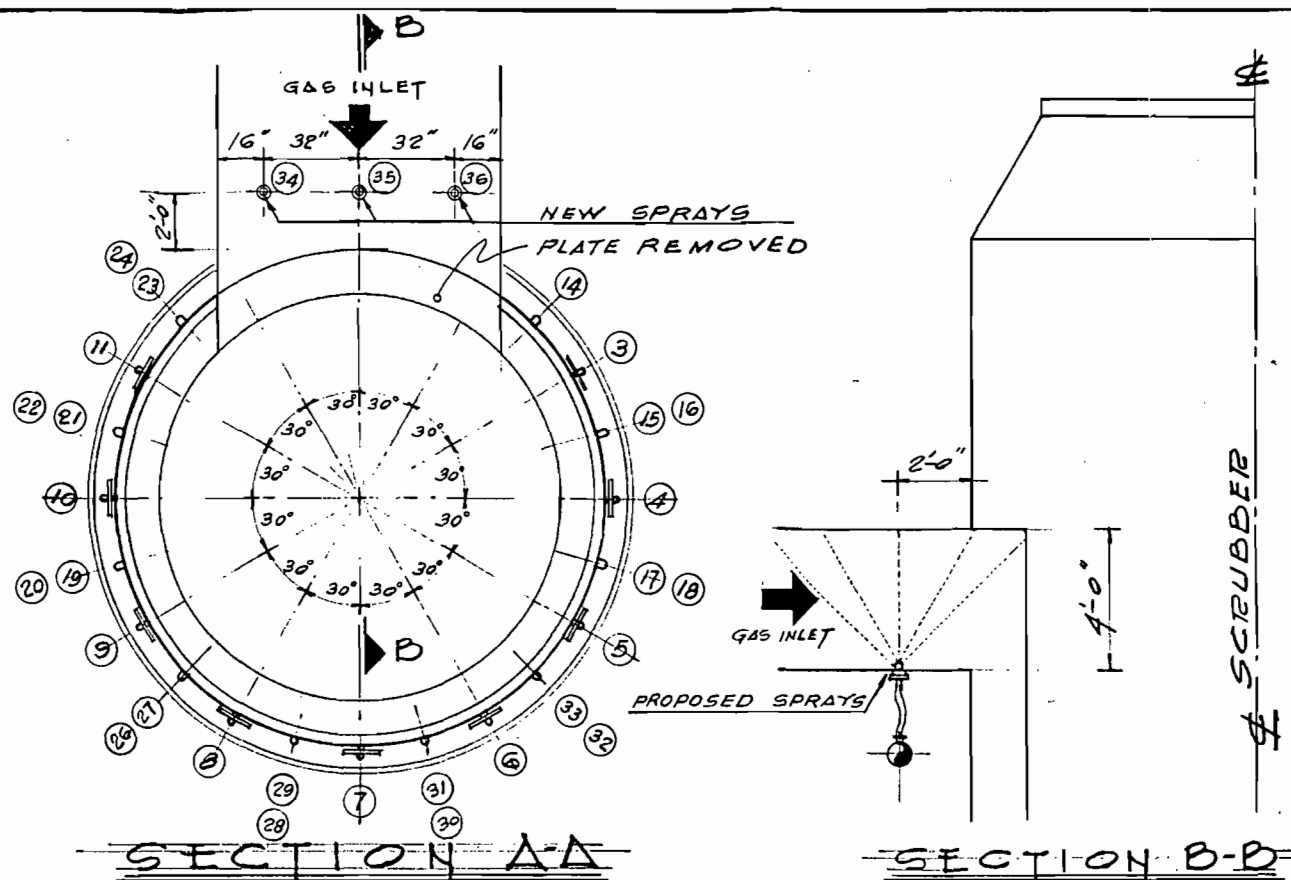
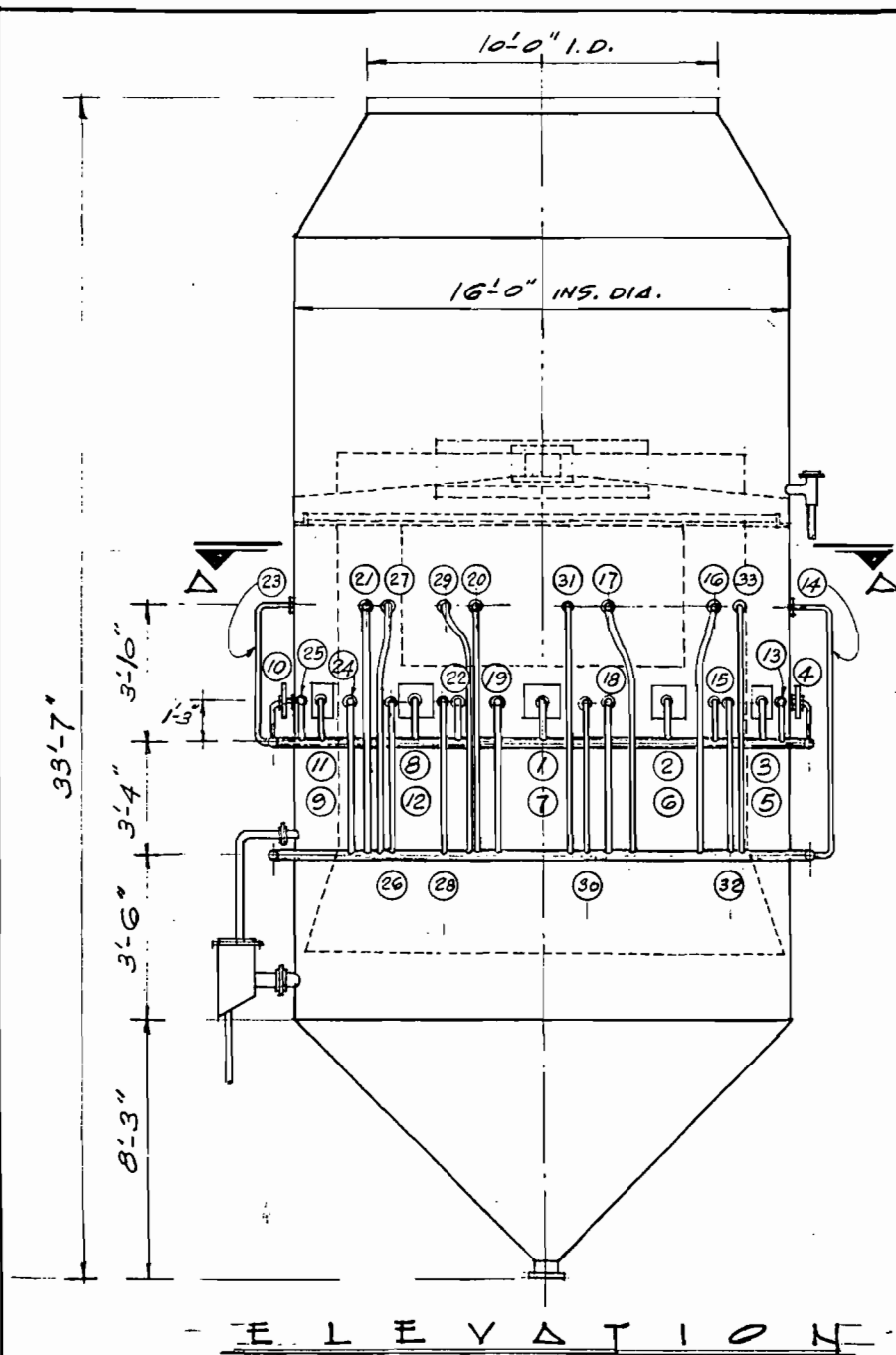
ADDITIONAL SPRAY NOZZLES: ⑬ TO ⑲

TOTAL SPRAY NOZZLES 1984-85: 25

1985-86 NEW SPRAY NOZZLES: ⑳ TO ⑳

TOTAL SPRAY NOZZLES 1985-86: 30

OSCEOLA FARMS COMPANY		
SUGAR FACTORY		
BOILER No 6 SCRUBBER (No. 1)		
SCALE: N.T.S.	DRAWN BY: A. APARICIO	DRAWING No.
DATE: NOV. 16-1985	REVISED: J. H. FARIÑAS	3-1350



- NEW 1985-85 IMPROVEMENTS:
1. THREE TEMPERATURE QUENCH SPRAY NOZZLES AT SCRUBBER INLET. (34 TO 36) AND (8) Nos. 26 TO 33 AS INDICATED.
 2. SPRAY NOZZLES 15 GALS/MIN. EACH. SPECIFY 90° HOLLOWCONE SPRAY PATTERN
 3. REMOVE BOTTOM PLATE OF GAS INLET.

OSCEOLA FARMS COMPANY		
SUGAR FACTORY		
BOILER No. 6 SCRUBBER (No. 2)		
SCALE: N.T.S.	DRAWN BY: A. APARICIO	DRAWING No.
DATE: Nov. 16-1985	REVISED: J. H. FARIÑAS	3-1351

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Nº 76099

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Osceola Farms Co. Date Nov. 25, 1985
Address Pahokee, Florida Dollars \$ 1,000.00
Applicant Name & Address Same as above
Source of Revenue _____
Revenue Code 001031 Application Number AC 50-112851
By Patricia G. Adams

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
WILLIAM L. BOYD, IV
PETER C. CUNNINGHAM
WILLIAM H. GREEN
WADE L. HOPPING
RICHARD D. MELSON
WILLIAM D. PRESTON
GARY P. SAMS
ROBERT P. SMITH, JR.

JAMES S. ALVES
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
RICHARD S. BRIGHTMAN
FRANK E. MATTHEWS
STEVEN A. MEDINA
CAROLYN S. RAEPPEL

November 14, 1985

DER

OF COUNSEL
W. ROBERT FOKES

BY HAND DELIVERY

NOV 14 1985

Clair Fancy
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

BAQM

Re: Osceola Farms Co.
Amendment of Boiler No. 6 Air Permits
(Nos. AC 50-4377 and AO 50-79267)

should be - AC50-043777

Dear Clair:

Enclosed for filing please find four copies of an application for amendment of the air construction and air operation permits previously issued by the Department for Osceola Farms Company's Boiler No. 6 in Palm Beach County. In addition to the completed application forms, we are submitting an air quality dispersion modeling analysis performed by KBN Engineering and Applied Sciences, Inc., along with a check payable to the Department in the amount of \$1,000.00 to cover the application fee.

When Boiler No. 6 was originally permitted, a maximum steam production rate of 150,000 pounds per hour was contemplated based on normal manufacturer's specifications and an assumed bagasse moisture content of 56 percent. In fact, Osceola has experienced bagasse with a moisture content of approximately 50 percent over the past three years. It is believed that the lower moisture content is a result of better mill extraction, better cane varieties and weather conditions. The boiler can, in fact, routinely achieve a steam production rate of 185,000 pounds per hour. The enclosed application is therefore being submitted in order to conform the Department's air permit to the present circumstances by increasing the permitted steam production capacity for Boiler No. 6 to 185,000 pounds per hour. Under the amended permit application, Osceola would operate Boiler No. 6 for a maximum of 157 days per crop season during the months from October through March.


Clair Fancy
November 14, 1985
Page 2

Osceola's consultants have calculated the increases in emissions of regulated pollutants that would be associated with the increased steam production rate for Boiler No. 6. While the short-term (pounds per hour) emissions would be higher than the currently permitted rates, no "significant net increase" in annual emissions would occur, as that term is defined at Florida Administrative Code Rule 17-2.500(2)(e) and 17-2.510(2)(e). Consequently, this modification does not trigger further new source review for PSD purposes or for nonattainment area purposes. The enclosed modeling analysis assumes an increase in steam production rate to 190,000 pounds per hour (and in the particulate emission rate to 56.1 pounds per hour), which is conservative in view of the 185,000 pounds per hour rate (corresponding to a particulate emission rate of 54.6 pounds per hour) sought by Osceola.

Please note that a copy of the enclosed application and supporting information is being submitted to the U. S. Environmental Protection Agency's Region IV office simultaneously because a federal PSD permit (No. PSD-FL-080) was issued for Boiler No. 6. Osceola is hopeful that amended permits can be issued in time to allow Boiler No. 6 to operate at available capacity before the end of the current crop season in February or March of 1986.

I would like to thank you in advance for your consideration in this matter. As always, please do not hesitate to call me if you or your staff have any questions about this permit application.

Sincerely,


Peter C. Cunningham

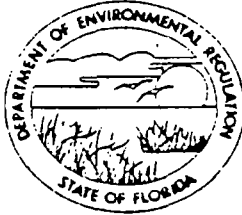
PCC/gb

Enclosures

cc: Bill Thomas
Willard Hanks

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTH FLORIDA
DISTRICT2269 BAY STREET
FORT MYERS, FLORIDA 33901

DER

NOV 14 1985

BAQM

BOB GRAHAM
GOVERNORVICTORIA J. TSCHINKEL
SECRETARYPHILIP R. EDWARDS
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Bagasse Boiler ☐ New¹ ☒ Existing¹APPLICATION TYPE: ☐ Construction ☐ Operation ☒ ModificationCOMPANY NAME: Osceola Farms Co. COUNTY: Palm BeachIdentify the specific emission point source(s) addressed in this application (i.e. Lime
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Bagasse-Fired Boiler #6SOURCE LOCATION: Street U.S. Rte. 98 City PahokeeZone 17 UTM: East 544.2 Km. North 2968.0 Km.Latitude 26° 49' 45"N Longitude 80° 33' 00"WAPPLICANT NAME AND TITLE: Alexander L. Fanjul, Vice PresidentAPPLICANT ADDRESS: P.O. Box 679 Pahokee, Fla. 33476

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Osceola Farms Co.

I certify that the statements made in this application for a modification of
 permit are true, correct and complete to the best of my knowledge and belief. Further,
 I agree to maintain and operate the pollution control source and pollution control
 facilities in such a manner as to comply with the provision of Chapter 403, Florida
 Statutes, and all the rules and regulations of the department and revisions thereof. I
 also understand that a permit, if granted by the department, will be non-transferable
 and I will promptly notify the department upon sale or legal transfer of the permitted
 establishment.

*Attach letter of authorization

Signed: Alexander L. FanjulAlexander L. Fanjul, Vice President
Name and Title (Please Type)Date: 11-14-85 Telephone No. (305) 924-7391

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have
 been designed/examined by me and found to be in conformity with modern engineering
 principles applicable to the treatment and disposal of pollutants characterized in the
 permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed Frank S. Kleeman

Frank S. Kleeman, P.E.

Name (Please Type)

Kleeman Engineering, Inc.

Company Name (Please Type)

4300 N.W. 44 St., Ft. Lauderdale, FL 33319

Mailing Address (Please Type)

Florida Registration No. 13622 Date: 11-14-85 Telephone No. (305) 733-5067

SECTION II: GENERAL PROJECT INFORMATION

- A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

This project involves modification of the operation of boiler #6 from 150,000 lbs/hr steam to 185,000 lbs/hr steam. The boiler is designed to burn bagasse, but can also burn a limited amount of auxiliary fuel oil. The pollution control facilities consist of a Joy Turbulaire impingement wet scrubber, size 90, type D. Full compliance is obtained.

- B. Schedule of project covered in this application (Construction Permit Application Only)
N/A
Start of Construction _____ Completion of Construction _____

- C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Equipment \$ 60,000

Installation 40,000

Total \$100,000

} Previously installed

- D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Operation Permit #AO-50-79267 issued 5-1-84 and expiring 5-1-89

Construction Permit #AC-50-43777 expiration date 4-15-82

C. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wks/yr 26; if power plant, hrs/yr _____; if seasonal, describe: _____

Up to 157 days of use during the 26 weeks in October through March.

F. If this is a new source or major modification, answer the following questions. (Yes or No)

- | | |
|--|-------------|
| 1. Is this source in a non-attainment area for a particular pollutant? | <u>Yes</u> |
| a. If yes, has "offset" been applied? | <u>N/A</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>No *</u> |
| c. If yes, list non-attainment pollutants. | <u>VOC</u> |
| 2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. | <u>No *</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD) requirement apply to this source? If yes, see Sections VI and VII. | <u>No</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? | <u>No</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? | <u>No</u> |
| H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? | <u>No</u> |
| a. If yes, for what pollutants? | _____ |
| b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted. | |

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

Information previously submitted with construction permit application.

* BACT and LAER were previously determined for Boiler No. 6. No significant net increase in emissions is associated with the present request for increased capacity.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Bagasse	S	0.02	97,400	A
Fuel Oil #6	S	1.0	237	B

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 97,637

2. Product Weight (lbs/hr): 185,000 Steam

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/xxhr	T/yr	
Particulates	54.6	102.9	0.2 lb/mmBtu ⁵	72.9	789.5	1487.4	E
SO ₂	186.1	350.6	Permit Cond. ⁶	186.1	206.6	389.2	E
CO	90.4	170.3	" "	90.4	90.4	170.3	E
VOC	90.4	170.3	" "	90.4	90.4	170.3	E
NO _x	62.0	116.8	" "	62.0	62.0	116.8	E

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

⁵BACT limit to remain at .15 lb/mmBtu, which is equivalent to 54.6 lb/hr.

⁶Reflects presently permitted emission rate (lb/hr) with increased capacity to 185,000 pounds per hour of steam.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Joy Turbulaire	Particulates	93.3	5% under 10	Stack test
Impingement Scrubber			20% under 20	
Size 90 Type D			75% over 20	
14 ft. diameter				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Bagasse	97,400	99,300	357
Fuel Oil #6	39 gal/hr	65 gal/hr	9.8

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis: Fuel Oil Bagasse Fuel Oil Bagasse
Percent Sulfur: 1.0 0.02 Percent Ash: 0.05 1.1
Density: 8.0 - lbs/gal Typical Percent Nitrogen: 0.3
Heat Capacity: 18,850 3,600 BTU/lb 150,800 BTU/gal
Other Fuel Contaminants (which may cause air pollution): Hydrocarbons

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average N/A Maximum

G. Indicate liquid or solid wastes generated and method of disposal.

Scrubber water containing particulate solids goes to 40 acre settling pond.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 90 ft. Stack Diameter: 6.3 ft.
 Gas Flow Rate: 97,000 ACFM 64,000 DSCFM Gas Exit Temperature: 155 °F.
 Water Vapor Content: 13 % Velocity: 50 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: ☐ Cyclone ☐ Wet Scrubber ☐ Afterburner
☐ Other (specify) _____

EMISSION (Initial Figures Taken From DER Permit #AC 50-43777)

Partic. $44.3 \times 185,000 \div 150,000 = 54.6$
 $54.6 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 102.9$
 SO₂ $150.9 \times 185,000 \div 150,000 = 186.1$
 $186.1 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 350.6$
 CO $73.3 \times 185,000 \div 150,000 = 90.4$
 $90.4 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 170.3$
 VOC $73.3 \times 185,000 \div 150,000 = 90.4$
 $90.4 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 170.3$
 NO_x $50.3 \times 185,000 \div 150,000 = 62.0$
 $62.0 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 116.8$

ALLOWED EMISSIONS

Particulates

$44.3 \times .2 \text{ lbs/mmBTU} \div .15 = 59.07 \text{ lbs/hr. at } 150,000 \text{ lbs/hr steam}$
 $59.07 \text{ lbs/hr} \times 185,000 \div 150,000 = 72.85 \text{ lbs/hr at } 185,000 \text{ lbs/hr steam}$

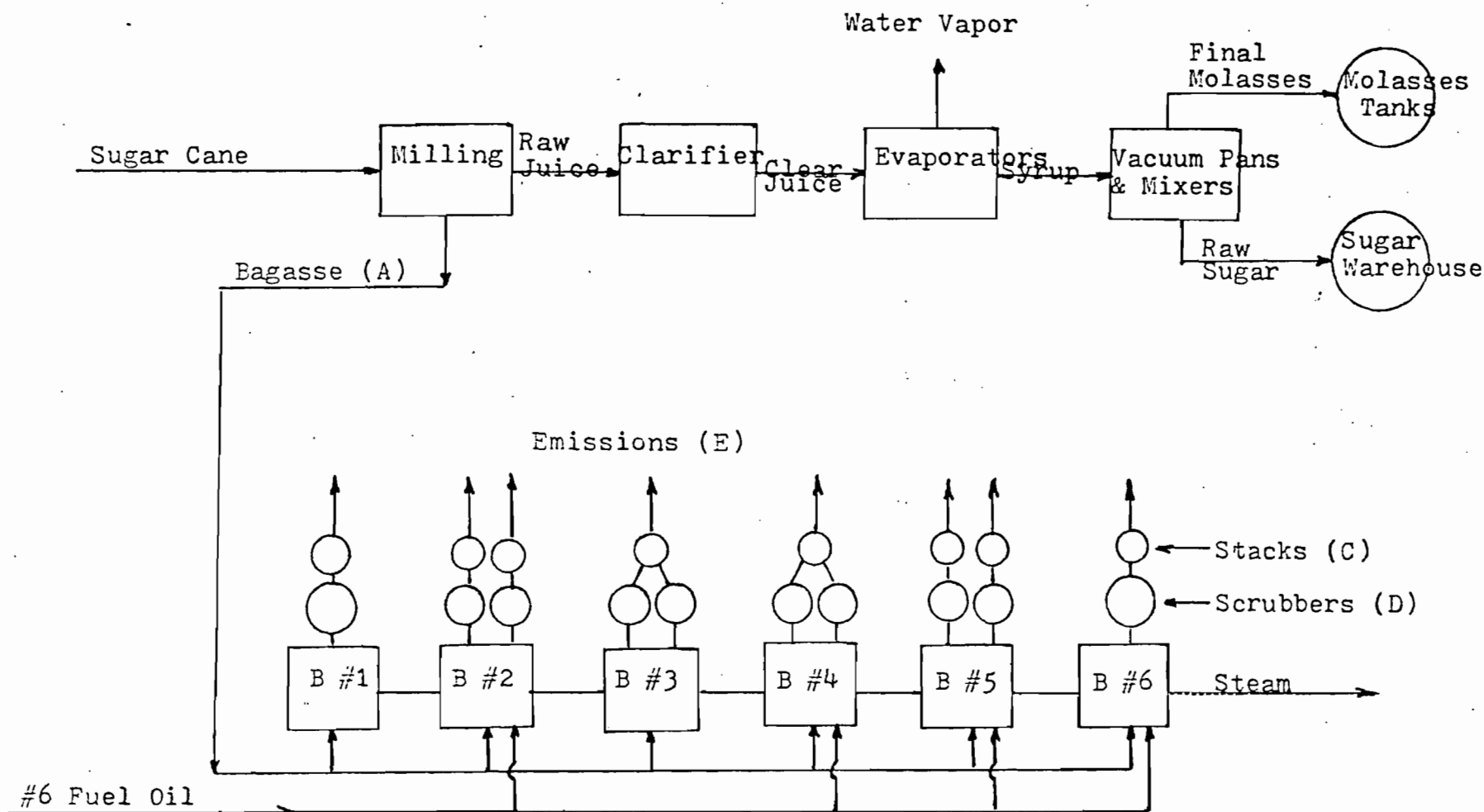
POTENTIAL EMISSION (Ratios Taken From DER Technical Evaluation and Preliminary Determination, Pg. 8)Particulates (93.3% Efficiency for the Scrubber)

$640.6 \div 44.3 \times 54.6 = 789.5 \text{ lbs/hr}$
 $789.5 \times 157 \text{ days} \times 24 \text{ hr.} \div 2,000 = 1487.4 \text{ tons/yr}$
 SO₂ $167.7 \div 150.9 \times 186.1 = 206.6 \text{ lb/hr}$
 $206.6 \times 157 \text{ days} \times 24 \text{ hr} \div 2,000 = 389.2 \text{ tons/yr}$

NO_x; CO; and VOC - Assume No Removal

Page 5.E. Max Heat-Bagasse $99,300 \times 3,600 \div 1,000,000 = 357$

Fuel Oil $65 \times 8 \text{ lbs/gal} \times 18,850 \div 1,000,000 = 9.8 \text{ mmBTU/hr}$



OSCEOLA FARMS CO. PAHOKEE, FLA.

SCALE:

APPROVED BY:

DRAWN BY

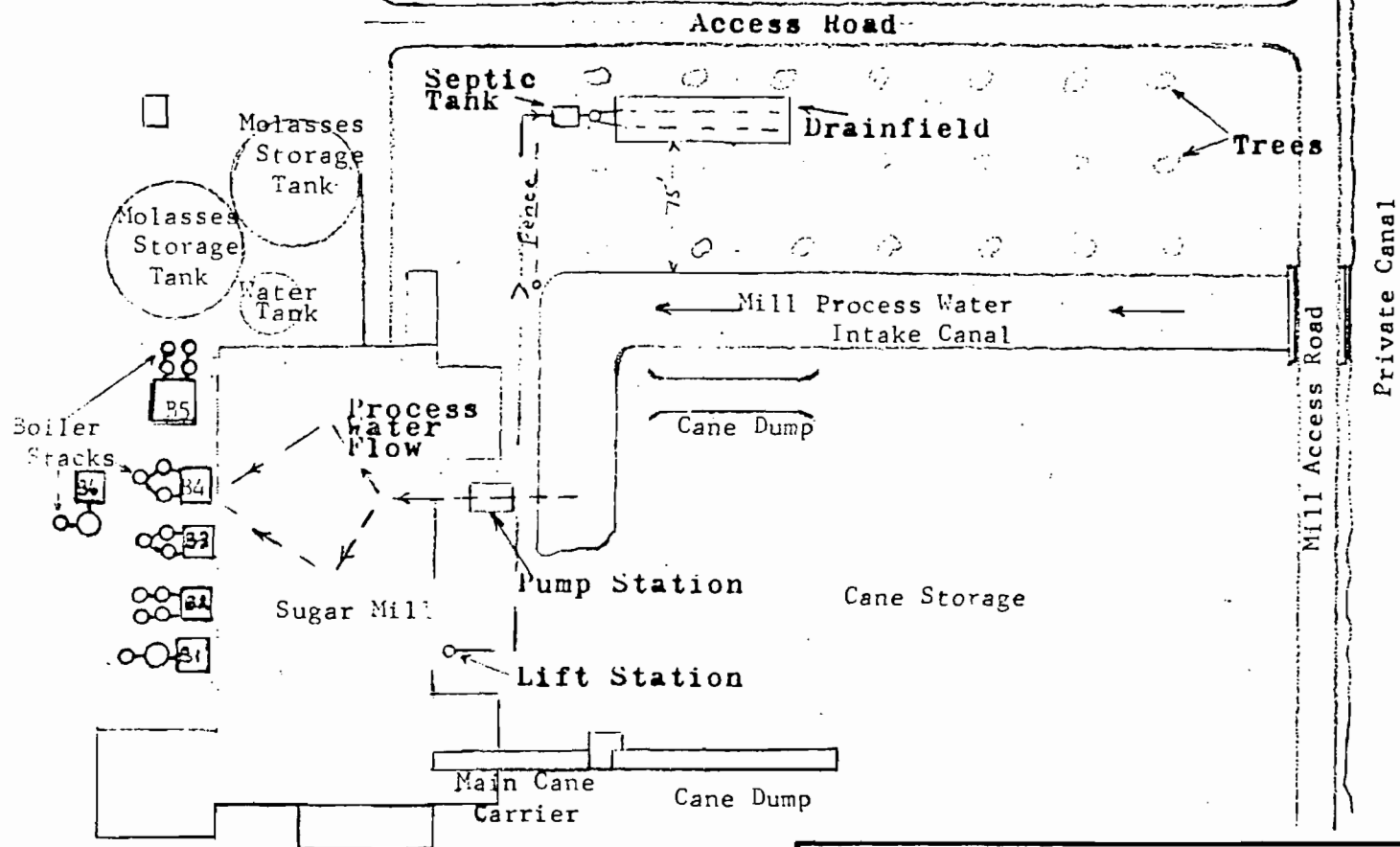
DATE: 5-25-81

REVISED

PROCESS FLOW DIAGRAM

Kleeman Engineering, Inc. Ft. Lauderdale

DRAWING NUMBER



OSCEOLA FARMS CO. Pahokee, Fla.

SCALE: 1" = 100'

APPROVED BY:

FSK

DRAWN BY

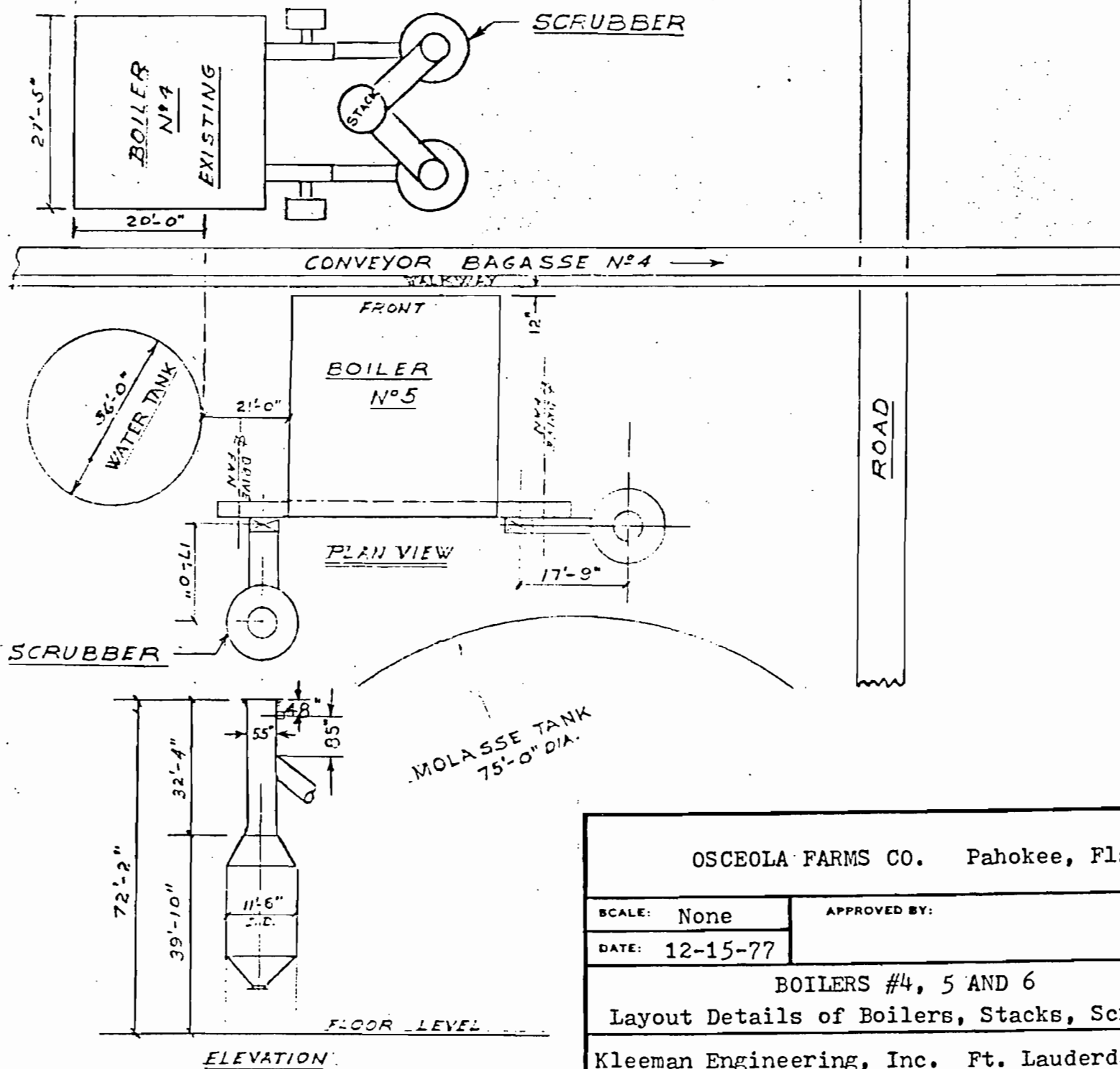
DATE: 5-25-81

REVISED

PLOT PLAN

Kleeman Engineering, Inc. Ft. Lauderdale, Fla.

DRAWING NUMBER



OSCEOLA FARMS CO. Pahokee, Fla.

SCALE: None

APPROVED BY:

DRAWN BY R. Lopez

DATE: 12-15-77

REVISED 8-15-79

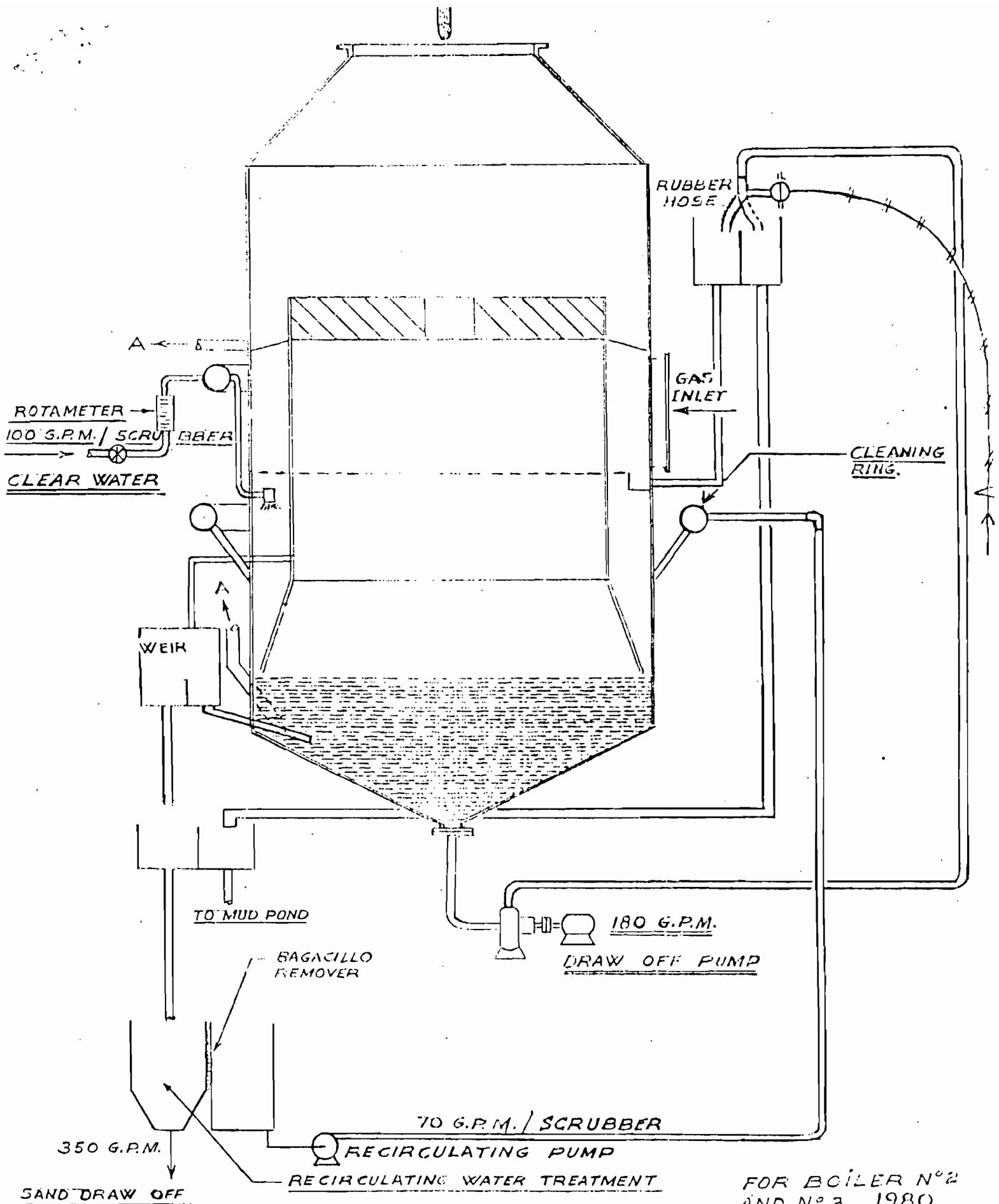
BOILERS #4, 5 AND 6

Layout Details of Boilers, Stacks, Scrubbers & ID Fans

Kleeman Engineering, Inc. Ft. Lauderdale, Fla. 33301

DRAWING NUMBER

33301

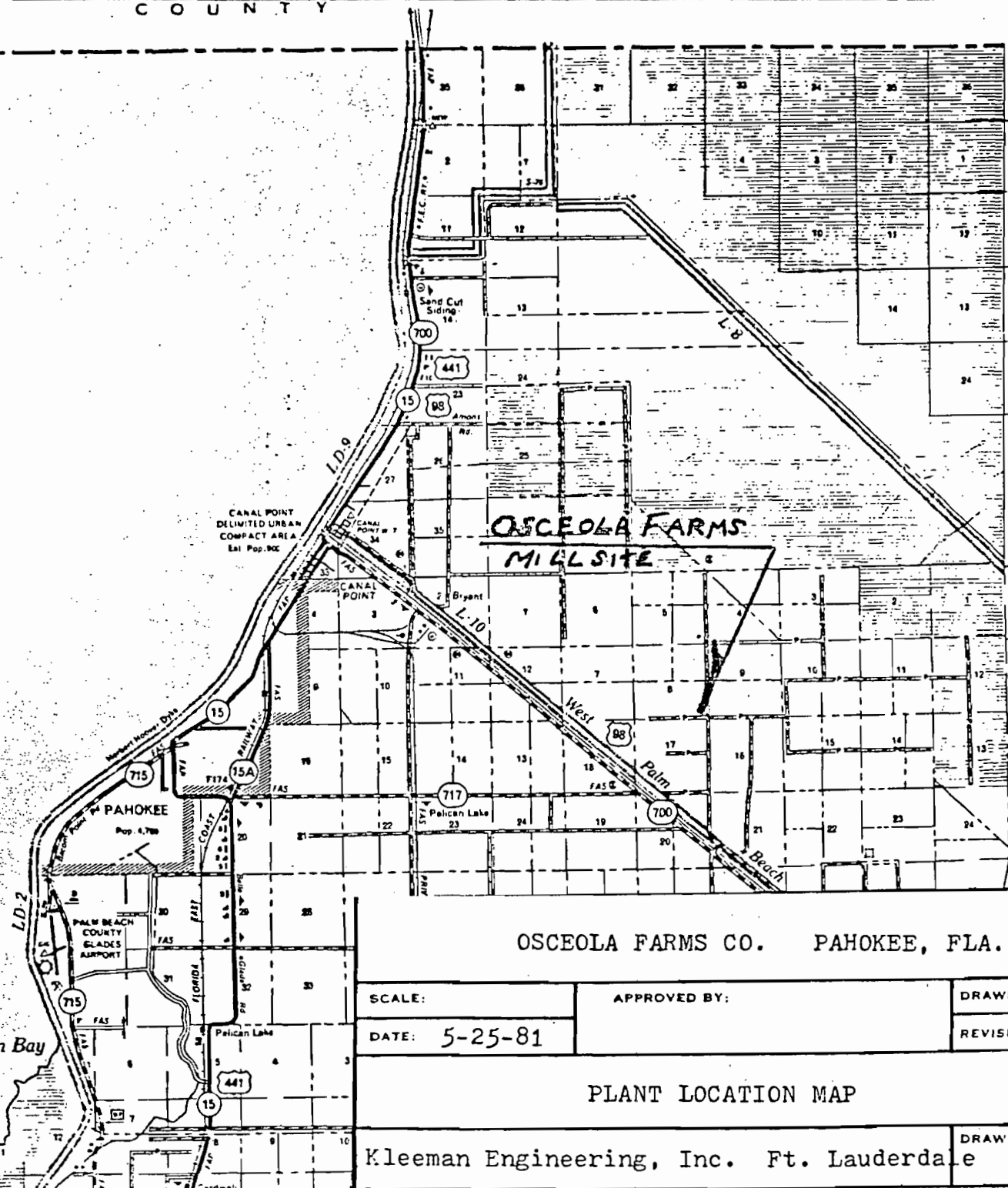
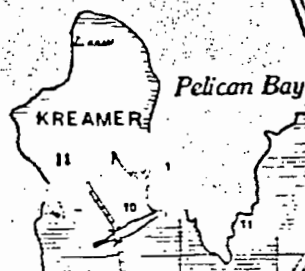


OSCEOLA FARMS COMPANY
INTALLATION FOR SCRUBBER'S

REV. 2-4-24-80

k e

h o b e e



OSCEOLA FARMS CO. PAHOKEE, FLA.

SCALE:

APPROVED BY:

DRAWN BY

DATE: 5-25-81

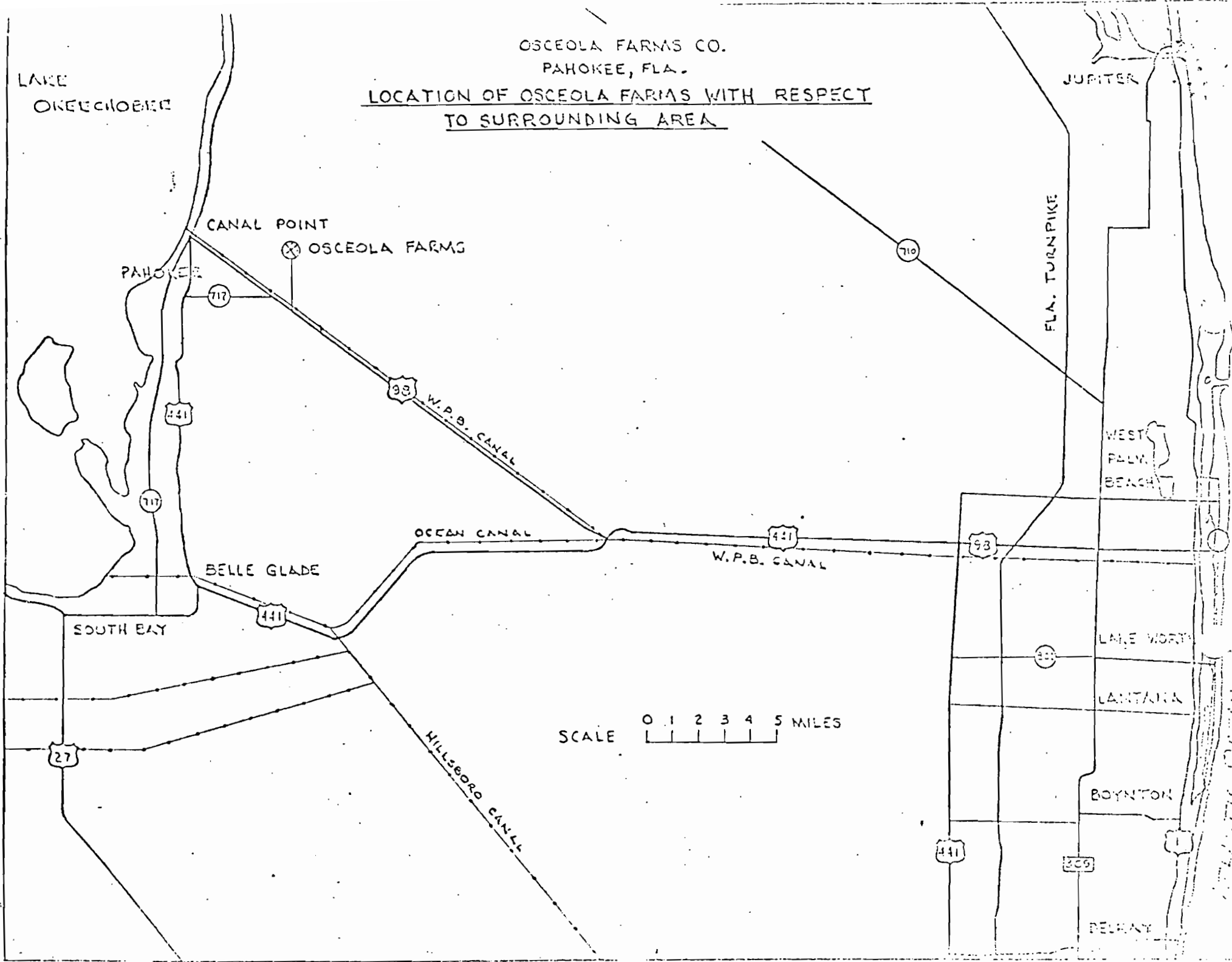
REVISED

PLANT LOCATION MAP

Kleeman Engineering, Inc. Ft. Lauderdale

DRAWING NUMBER

OSCEOLA FARMS CO.
PAHOKEE, FLA.
LOCATION OF OSCEOLA FARMS WITH RESPECT
TO SURROUNDING AREA





DER

September 26, 1985
85009

NOV 14 1985

BAQM

Mr. Frank Kleeman
Kleeman Engineering
404 N. Andrews Avenue
Ft. Lauderdale, FL 33301

RE: Osceola Farms Modeling Analysis

Dear Frank:

Please find enclosed two copies of the Air Quality Impact Analysis for the Osceola Farms particulate increase from Boiler No. 6. Please review and provide any comments, if any, at your earliest convenience. Also enclosed is one copy of supportive computer model printouts. This printout should be submitted to DER along with the report. Thank you for asking us to assist you in this project.

Sincerely,

David A. Buff, P.E.
Principal Engineer

DAB/msb

Enclosures

KBN ENGINEERING AND APPLIED SCIENCES, INC.

P. O. Box 14288 5700 SW 34th Street Gainesville, FL 32604 904/375-8000

AIR QUALITY IMPACT ANALYSIS OF INCREASING PARTICULATE
EMISSIONS FROM OSCEOLA FARMS BOILER NO. 6

1.0 INTRODUCTION

Osceola Farms Company (Osceola) is proposing to increase the permitted steam production capacity of Boiler No. 6 at its sugar cane processing mill located near Bryant, Florida. The maximum permitted steam production capacity of the boiler will increase from 150,000 lb/hr to 190,000 lb/hr. An increase in the allowable heat input rate, bagasse fuel burning rate, and allowable particulate matter (PM) emissions will be associated with the steam production increase. This report addresses the air quality impact of the proposed increase in allowable PM emissions from Boiler No. 6.

2.0 EMISSIONS AND STACK PARAMETER CHANGES

The current permitted heat input rate for Boiler No. 6 burning bagasse fuel is 295×10^6 BTU/hr at 150,000 lb/hr steam production. At the proposed steam production rate of 190,000 lb/hr, the maximum heat input due to bagasse will be 374×10^6 BTU/hr. The PM emission limit applicable to Boiler No. 6 is 0.15 lb/ 10^6 BTU. The calculated maximum increase in PM emissions associated with the proposed steam production increase is 11.8 lb/hr (56.1 lb/hr @ 190,000 lb/hr steam versus 44.3 lb/hr @ 150,000 lb/hr steam).

Stack parameters for Boiler No. 6 operating at 190,000 lb/hr steam production were estimated from recent source test data. In December 1984, three PM emissions tests were conducted on Boiler No. 6. Steam production during the tests ranged from 168,000 lb/hr to 182,200 lb/hr. The exhaust gas flow rates measured during the tests, in actual cubic feet per minute (acfm), were plotted against steam production in order to estimate the flow rate for 190,000 lb/hr steam. These results are shown in Figure 1. The relationship between acfm and steam rate is close to linear, and on this basis the exhaust gas flow rate estimated for 190,000 lb/hr steam is 97,000 acfm.

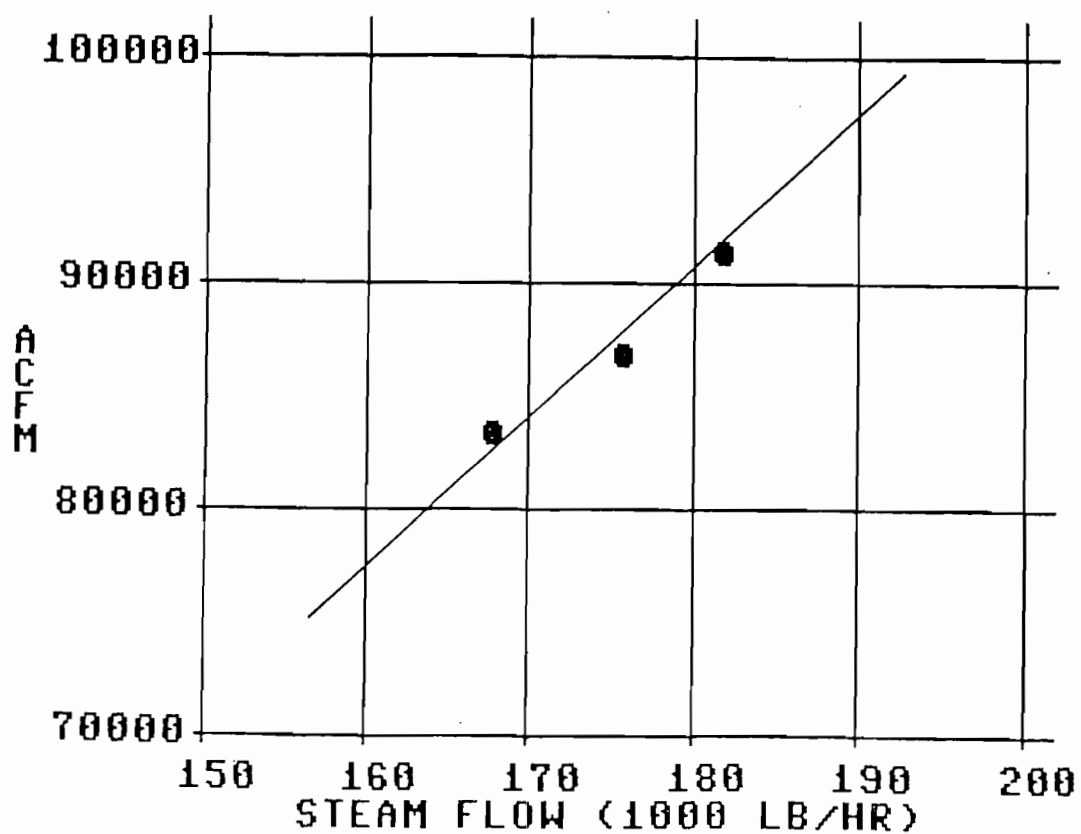


Figure 1. Boiler No. 6 Steam Flow versus Exhaust Gas Flow Rate



The exhaust gas temperature during the three tests was nearly constant at 155° F (\pm 2°F). Therefore, an exhaust gas temperature of 155°F was considered representative of operation at the higher steam production rate. The complete set of stack parameters used as input to the atmospheric dispersion modeling analysis (see Section 3.0) were as follows:

Stack height: 90 ft.

Stack diameter: 76 in.

Exhaust gas temperature: 155°F

Exhaust gas flow rate: 97,000 acfm

Exhaust gas velocity: 3016 ft/min

3.0 IMPACT ANALYSIS METHODOLOGY

The Industrial Source Complex Short-Term (ISCST) model was used in the analysis to predict maximum 24-hour, and annual average concentrations due to the increased emissions from Boiler No. 6 at Osceola. The rural mode option was selected for dispersion and stability parameters because of the remote, rural nature of the Florida sugar cane area. Default values for wind profile exponents and vertical potential temperature gradients, and final plume rise option were selected, as recommended by Florida Department of Environmental Regulation (DER) and U.S. Environmental Protection Agency (EPA).

The modeling was performed in screening and refined phases. In the screening phase, receptors were placed in a radial grid which was centered on the Boiler No. 6 stack location. A total of 36 radials were used, spaced at 10° intervals and extending from 10° to 360° from north. Receptors were placed along each radial at 300 m intervals, ranging from 100 m to 5500 m from the Boiler No. 6 stack location. A PM emission rate of 54.9 lb/hr (6.92 g/sec) was used in the screening analysis. The screening analysis allowed the identification of maximum annual impact, and worst-case 24-hour meteorological conditions.

In the refined modeling analysis, a refined receptor grid of 100 m spacing and a 2° radial spacing was used. The grid was centered about the location

of the highest, second-highest (H,2H) concentration identified from the screening analysis. The PM emission rate used in the refined analysis was 10.6 lb/hr. The actual increase in PM emissions from Boiler No. 6 is 11.8 lb/hr; therefore, the model results were adjusted by the ratio of the "actual" to "modeled" emission rates.

Meteorological data used in the modeling analysis consisted of five years of hourly surface data from West Palm Beach, Florida (1970-1974) and coincident upper air data from Miami, Florida. The sugar cane processing season in Florida generally runs from mid-October to mid-March (about 150 days per year). Because the exact crop season days can vary from year to year, the 182-day period extending from October thru March was evaluated to determine maximum 24-hour and annual impacts. Since five years of meteorological data were used in the evaluation, the H,2H 24-hour impacts were selected for comparison to air quality standards. The 182-day average concentrations predicted by the model were divided by 2 (182/365) in order to adjust to an annual average concentration.

The ISCST has a building downwash option which may be selected at the user's discretion to obtain an estimate of concentrations produced under building downwash conditions. Building downwash may occur when emissions are released into the wake caused by the wind movement over and around a structure. Because of the developmental nature of the building downwash equations used in the ISCST model, the downwash option was used only as a screening tool to evaluate the potential for downwash for Boiler No. 6. The analysis consisted of executing the ISCST model with the downwash option for the meteorological conditions under which the H,2H 24-hour concentration was predicted for non-downwash conditions. As suggested in the ISCST user's manual (EPA, 1979), the gradual plume rise option was used in conjunction with the building downwash option.

The area immediately surrounding the Osceola mill consists of sugar cane fields under ownership or control by Osceola, and to which the general public does not have access. This area extends at least 3 miles (4.8 km) in all directions from the Osceola plant. U.S. 98 represents the

nearest area of public access. The directions and distances of U.S. 98 to the Osceola mill are portrayed in Figure 2. Only receptors falling on or beyond the property boundaries were considered in predicting maximum air quality impacts due to Boiler No. 6.

4.0 AIR QUALITY IMPACT ANALYSIS RESULTS

The results of the air quality impact analysis for the proposed increase in PM emissions are summarized in Table 1 for both the screening and refined modeling evaluations. The maximum impacts reflect off-property impacts, as discussed in Section 3.0.

The screening analysis showed that the predicted maximum annual average impact of the increase is 0.1 ug/m^3 . This maximum predicted impact is well below the U.S. EPA and DER significance levels of 1 ug/m^3 for the annual averaging time. It is also well below the Florida DER ambient air quality standards (AAQS) of 60 ug/m^3 for the annual averaging time. No refined modeling analysis was performed for the annual averaging time, since the spatial variability of the annual concentrations are not expected to be large for the receptor grid used in the screening analysis.

From the screening analysis, the H,2H 24-hour PM impact due to the proposed increase in PM emissions is predicted to occur under Day 279, 1970 meteorological conditions, at a distance of 2800 m downwind and in a radial direction of 250° from north. The highest predicted 24-hour impact at this receptor occurred under Day 342, 1970 meteorological conditions. Since both the highest and H,2H impacts are similar in magnitude, both meteorological conditions were analyzed in the refined modeling analysis. The refined modeling analysis showed that Day 279, 1970 was indeed reflective of the H,2H 24-hour impact, which was 1.8 ug/m^3 . This 24-hour impact occurred at a distance of 2600 m downwind of the Osceola plant and along a radial direction of 250° .

The predicted H,2H 24-hour PM impact is well below the U.S. EPA and Florida DER significance level of 5 ug/m^3 for the 24-hour averaging time. The impact is also well below the Florida AAQS of 150 ug/m^3 .

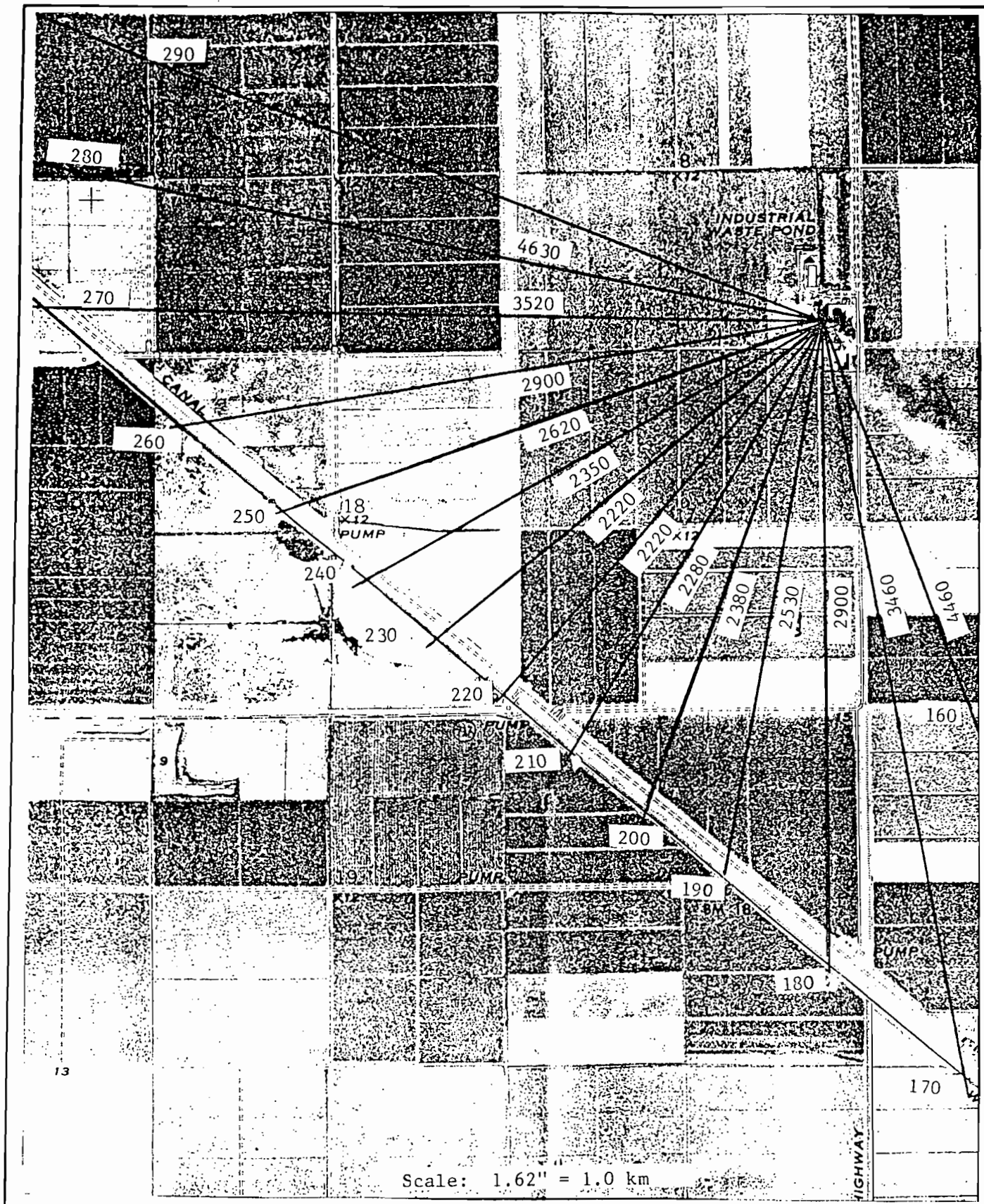


Figure 2. Location of Osceola Farms Sugar Mill in Relation to Closest Property Boundaries

KBRN

Table 1. Summary of Particulate Matter Air Quality Impact Analysis, Osceola Farms, Boiler No. 6

Averaging Time	Julian Day/Year	Distance (m)	Direction (°)	Maximum Concentration* (ug/m ³)
<u>Screening Analysis</u>				
24-hour	279/1970	2800	250	7.8 (1.5)
	277/1971	2500	240	5.9 (1.1)
	287/1972	2500	230	5.8 (1.1)
	291/1973	2800	250	5.9 (1.1)
	306/1974	2500	240	6.6 (1.3)
Annual	1970	2800	250	0.35 (0.07)
	1971	2800	250	0.30 (0.06)
	1972	2800	250	0.30 (0.06)
	1973	2800	250	0.35 (0.07)
	1974	2500	240	0.35 (0.07)
<u>Refined Analysis</u>				
24-Hour (w/o downwash)	279/1970	2600	250	1.6 (1.8)
	342/1970	2600	250	1.7 (1.9)
24-hour w/downwash)	279/1970	2600	250	1.7 (1.9)
	342/1970	2600	250	1.6 (1.8)

*Screening Analysis concentrations based upon particulate matter emission rate of 54.9 lb/hr and Refined Analysis concentrations based upon 10.6 lb/hr. Concentrations based upon 11.8 lb/hr actual emission increase is shown in parenthesis. Annual concentrations reflect 182-day per year operation. Concentrations for 24-hour averaging time are based upon highest, second-highest predicted impacts.

To investigate the potential for building downwash at the Osceola plant to cause excessive ground-level concentrations, the meteorological conditions causing both the highest and H,2H 24-hour PM impacts (Days 279 and 342, 1970) were evaluated with the building downwash option within the ISCST model. The most significant structure at the Osceola plant is the mill building, which is located adjacent to the boiler stacks (see Figure 3). The dimensions of this building are as follows:

Height - 70 ft

Width - 120 ft

Length - 250 ft

The downwash analysis, which also evaluated only off-plant property impacts, predicted an increase of only 0.1 ug/m^3 for the H,2H 24-hour impact (Day 279, 1970), and a 0.1 ug/m^3 decrease for the highest 24-hour impact (Day 342, 1970). Based upon these results, it is concluded that building downwash conditions will not cause excessive off-plant property impacts.

The increase in PM air quality impacts due to the proposed increase in steam production are predicted to be below all air quality impact significance levels, and therefore, no further air quality analysis is necessary. The proposed PM emissions increase is therefore not expected to significantly contribute to or cause a violation of any AAQS.

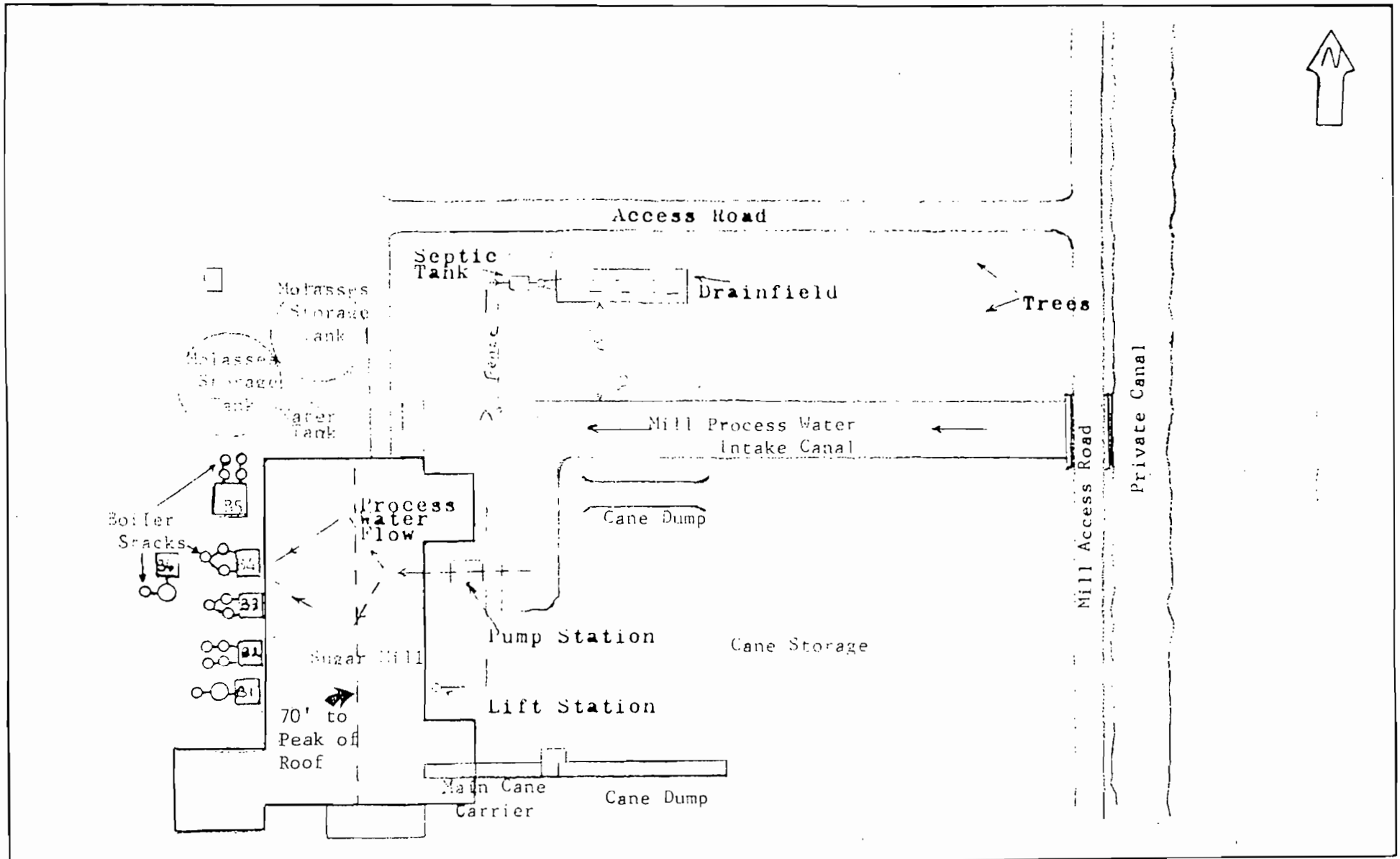


Figure 3. Plot Plan of Osceola Farm Company Sugar Mill

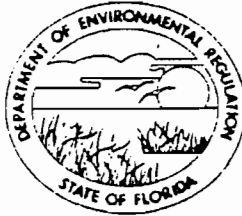
Scale: 1" = 100'



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTH FLORIDA
DISTRICT

2269 BAY STREET
FORT MYERS, FLORIDA 33901



DER

NOV 14 1985

BAQM

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PHILIP R. EDWARDS
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Bagasse Boiler ☐ New¹ ☒ Existing¹

APPLICATION TYPE: ☐ Construction ☐ Operation ☒ Modification

COMPANY NAME: Osceola Farms Co. COUNTY: Palm Beach

Identify the specific emission point source(s) addressed in this application (i.e. Lime
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Bagasse-Fired Boiler #6

SOURCE LOCATION: Street U.S. Rte. 98 City Pahokee

Zone 17 UTM: East 544.2 Km. North 2968.0 Km.

Latitude 26° 49' 45"N Longitude 80° 33' 00"W

APPLICANT NAME AND TITLE: Alexander L. Fanjul, Vice President

APPLICANT ADDRESS: P.O. Box 679 Pahokee, Fla. 33476

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Osceola Farms Co.

I certify that the statements made in this application for a modification of
permit are true, correct and complete to the best of my knowledge and belief. Further,
I agree to maintain and operate the pollution control source and pollution control
facilities in such a manner as to comply with the provision of Chapter 403, Florida
Statutes, and all the rules and regulations of the department and revisions thereof. I
also understand that a permit, if granted by the department, will be non-transferable
and I will promptly notify the department upon sale or legal transfer of the permitted
establishment.

*Attach letter of authorization

Signed: Alexander L. Fanjul
Alexander L. Fanjul, Vice President
Name and Title (Please type)

Date: 11-14-85 Telephone No. (305) 924-7391

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have
been designed/examined by me and found to be in conformity with modern engineering
principles applicable to the treatment and disposal of pollutants characterized in the
permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed

Frank S. Kleeman

Frank S. Kleeman, P.E.

Name (Please Type)

Kleeman Engineering, Inc.

Company Name (Please Type)

4300 N.W. 44 St., Ft. Lauderdale, FL 33319

Mailing Address (Please Type)

Florida Registration No. 13622

Date: 11-14-85

Telephone No. (305) 733-5067

SECTION II: GENERAL PROJECT INFORMATION

- A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

This project involves modification of the operation of boiler #6 from 150,000 lbs/hr steam to 185,000 lbs/hr steam. The boiler is designed to burn bagasse, but can also burn a limited amount of auxiliary fuel oil. The pollution control facilities consist of a Joy Turbulaire impingement wet scrubber, size 90, type D. Full compliance is obtained.

- B. Schedule of project covered in this application (Construction Permit Application Only)
N/A
Start of Construction _____ Completion of Construction _____

- C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Equipment \$ 60,000

Installation 40,000

Total \$100,000

} Previously installed

- D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Operation Permit #AO-50-79267 issued 5-1-84 and expiring 5-1-89

Construction Permit #AC-50-43777 expiration date 4-15-82

G. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wks/yr 26;
if power plant, hrs/yr _____; if seasonal, describe: _____

Up to 157 days of use during the 26 weeks in October through March.

F. If this is a new source or major modification, answer the following questions.
(Yes or No)

- | | |
|---|-------------|
| 1. Is this source in a non-attainment area for a particular pollutant? | <u>Yes</u> |
| a. If yes, has "offset" been applied? | <u>N/A</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>No *</u> |
| c. If yes, list non-attainment pollutants. | <u>VOC</u> |
| 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. | <u>No *</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. | <u>No</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? | <u>No</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? | <u>No</u> |
| H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? | <u>No</u> |
| a. If yes, for what pollutants? | _____ |
| b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted. | |

Attach all supportive information related to any answer of "Yes". Attach any justifi-
cation for any answer of "No" that might be considered questionable.

Information previously submitted with construction permit application.

* BACT and LAER were previously determined for Boiler No. 6. No
significant net increase in emissions is associated with the
present request for increased capacity.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Bagasse	S	0.02	97,400	A
Fuel Oil #6	S	1.0	237	B

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 97,637

2. Product Weight (lbs/hr): 185,000 Steam

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/xxhr	T/yr	
Particulates	54.6	102.9	0.2 lb/mmBtu ⁵	72.9	789.5	1487.4	E
SO ₂	186.1	350.6	Permit Cond. ⁶	186.1	206.6	389.2	E
CO	90.4	170.3	" "	90.4	90.4	170.3	E
VOC	90.4	170.3	" "	90.4	90.4	170.3	E
NO _x	62.0	116.8	" "	62.0	62.0	116.8	E

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

⁵BACT limit to remain at .15 lb/mmBtu, which is equivalent to 54.6 lb/hr.

⁶Reflects presently permitted emission rate (lb/hr) with increased capacity to 185,000 pounds per hour of steam.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Joy Turbulaire	Particulates	93.3	5% under 10	Stack test
Impingement Scrubber			20% under 20	
Size 90 Type D			75% over 20	
14 ft. diameter				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Bagasse	97,400	99,300	357
Fuel Oil #6	39 gal/hr	65 gal/hr	9.8

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis: Fuel Oil Bagasse Fuel Oil Bagasse
Percent Sulfur: 1.0 0.02 Percent Ash: 0.05 1.1
Density: 8.0 - lbs/gal Typical Percent Nitrogen: 0.3
Heat Capacity: 18,850 3,600 BTU/lb 150,800 BTU/gal
Other Fuel Contaminants (which may cause air pollution): Hydrocarbons

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average N/A Maximum

G. Indicate liquid or solid wastes generated and method of disposal.

Scrubber water containing particulate solids goes to 40 acre settling pond.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 90 ft. Stack Diameter: 6.3 ft.
 Gas Flow Rate: 97,000 ACFM 64,000 DSCFM Gas Exit Temperature: 155 °F.
 Water Vapor Content: 13 % Velocity: 50 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: ☐ Cyclone ☐ Wet Scrubber ☐ Afterburner

☐ Other (specify) _____

EMISSION (Initial Figures Taken From DER Permit #AC 50-43777)

Partic. $44.3 \times 185,000 \div 150,000 = 54.6$
 $54.6 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 102.9$
 SO₂ $150.9 \times 185,000 \div 150,000 = 186.1$
 $186.1 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 350.6$
 CO $73.3 \times 185,000 \div 150,000 = 90.4$
 $90.4 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 170.3$
 VOC $73.3 \times 185,000 \div 150,000 = 90.4$
 $90.4 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 170.3$
 NO_x $50.3 \times 185,000 \div 150,000 = 62.0$
 $62.0 \times 24 \text{ hr.} \times 157 \text{ days} \div 2,000 = 116.8$

ALLOWED EMISSIONS

Particulates

$44.3 \times .2 \text{ lbs/mmBTU} \div .15 = 59.07 \text{ lbs/hr. at } 150,000 \text{ lbs/hr steam}$
 $59.07 \text{ lbs/hr} \times 185,000 \div 150,000 = 72.85 \text{ lbs/hr at } 185,000 \text{ lbs/hr steam}$

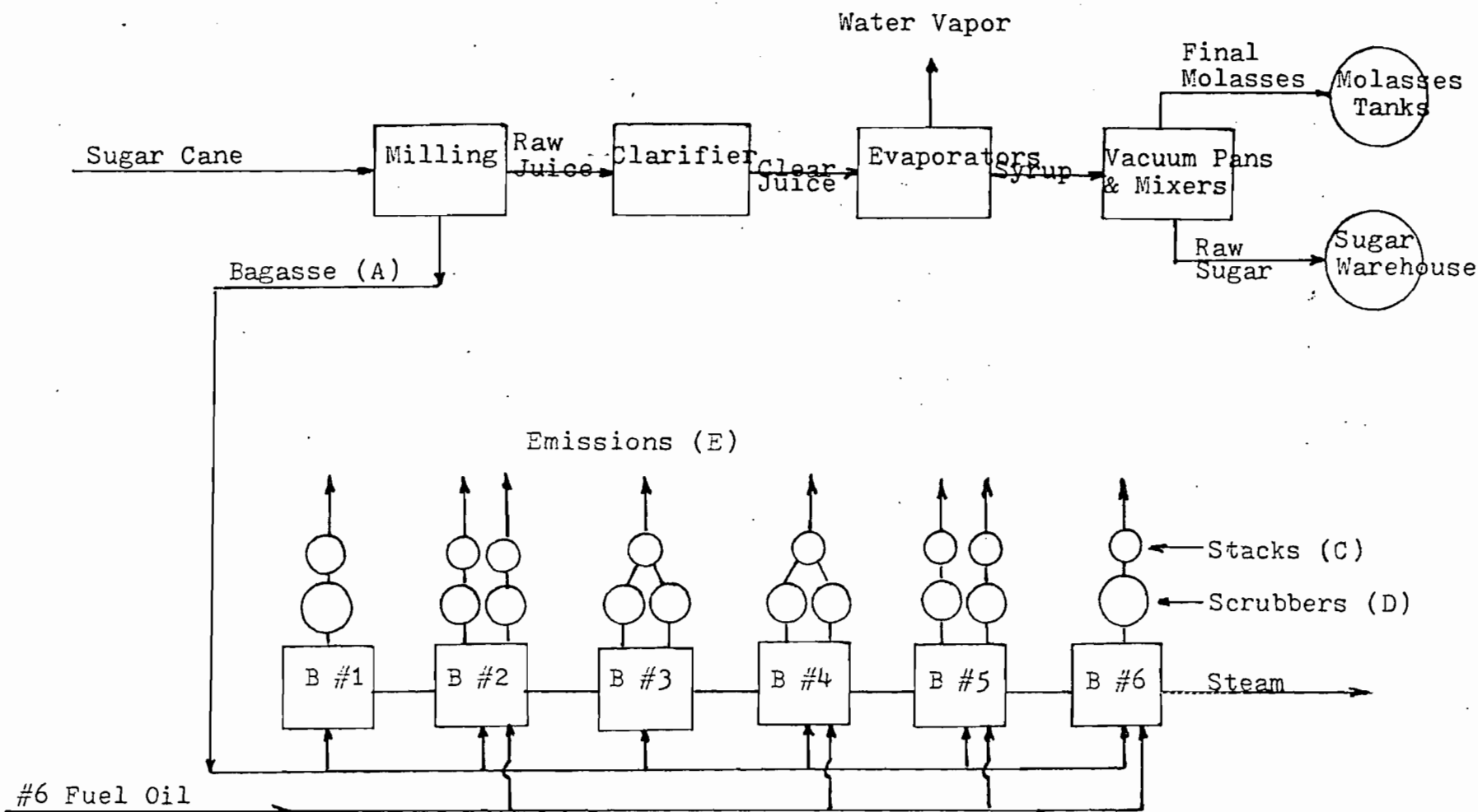
POTENTIAL EMISSION (Ratios Taken From DER Technical Evaluation and Preliminary Determination, Pg. 8)Particulates (93.3% Efficiency for the Scrubber)

$640.6 \div 44.3 \times 54.6 = 789.5 \text{ lbs/hr}$
 $789.5 \times 157 \text{ days} \times 24 \text{ hr.} \div 2,000 = 1487.4 \text{ tons/yr}$
 SO₂ $167.7 \div 150.9 \times 186.1 = 206.6 \text{ lb/hr}$
 $206.6 \times 157 \text{ days} \times 24 \text{ hr} \div 2,000 = 389.2 \text{ tons/yr}$

NO_x; CO; and VOC - Assume No Removal

Page 5.E. Max Heat-Bagasse $99,300 \times 3,600 \div 1,000,000 = 357$

Fuel Oil $65 \times 8 \text{ lbs/gal} \times 18,850 \div 1,000,000 = 9.8 \text{ mmBTU/hr}$



OSCEOLA FARMS CO. PAHOKEE, FLA.

SCALE:

APPROVED BY:

DRAWN BY

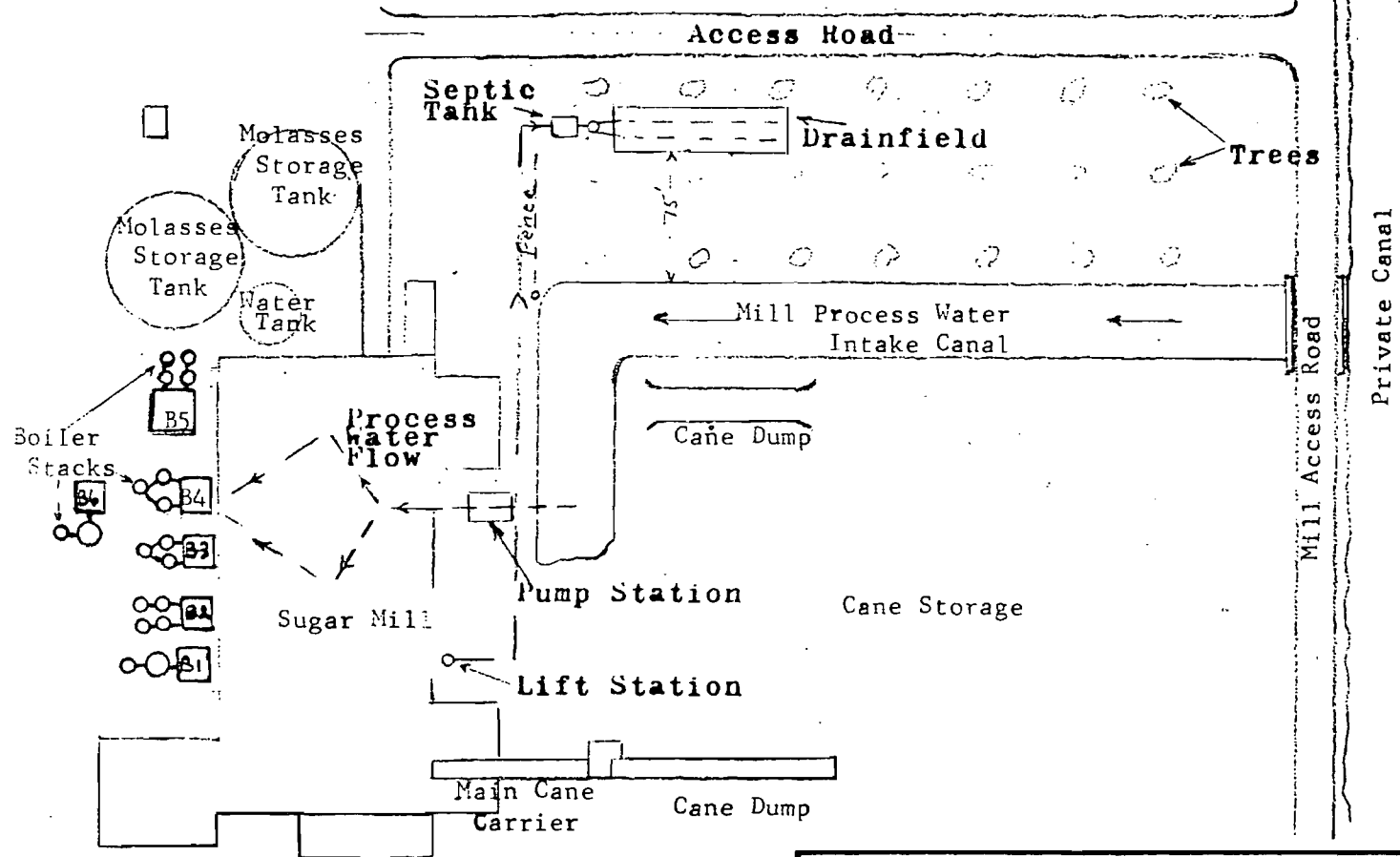
DATE: 5-25-81

REVISED

PROCESS FLOW DIAGRAM

Kleeman Engineering, Inc. Ft. Lauderdale

DRAWING NUMBER



OSCEOLA FARMS CO. Pahokee, Fla.

SCALE: 1" = 100'

APPROVED BY:

FSK

DRAWN BY

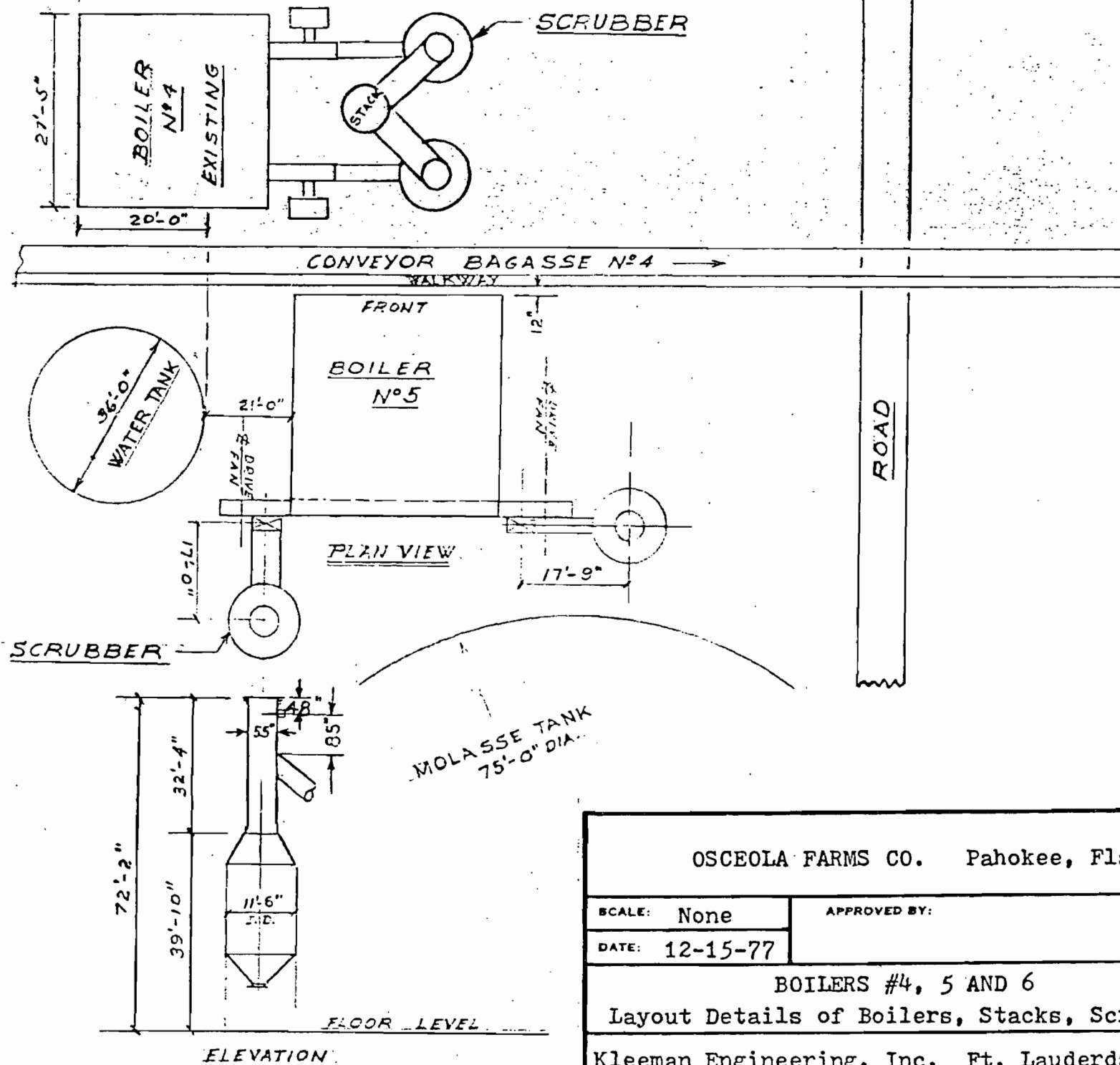
DATE: 5-25-81

REVISED

PLOT PLAN

Kleeman Engineering, Inc. Ft. Lauderdale, Fla.

DRAWING NUMBER



OSCEOLA FARMS CO. Pahokee, Fla.

SCALE: None

APPROVED BY:

DRAWN BY R. Lopez

DATE: 12-15-77

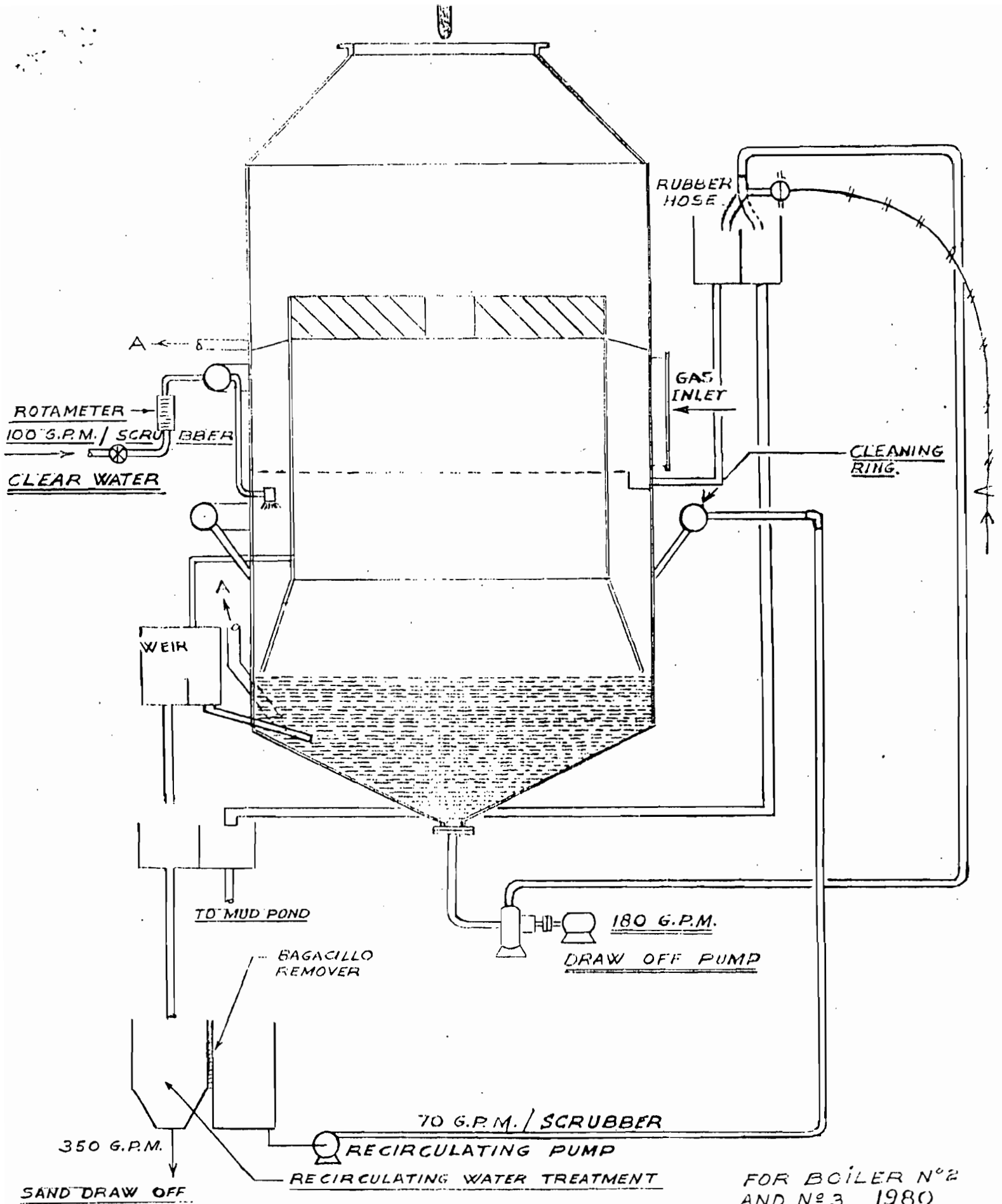
REVISED 8-15-79

BOILERS #4, 5 AND 6

Layout Details of Boilers, Stacks, Scrubbers & ID Fans

Kleeman Engineering, Inc. Ft. Lauderdale, Fla. 33301

DRAWING NUMBER

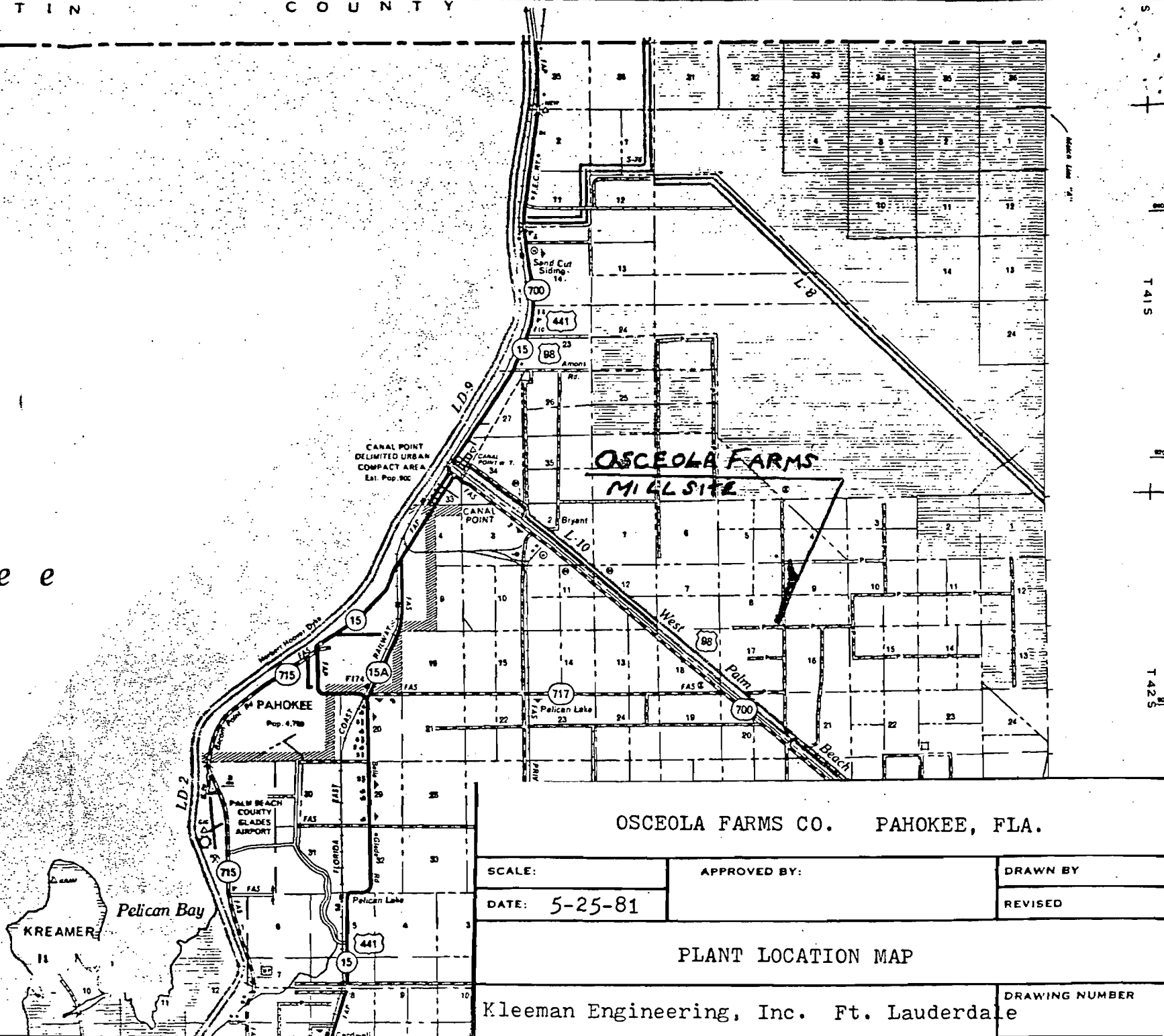


OSCEOLA FARMS COMPANY
INTALLATION FOR SCRUBBER'S

REV. 2 4-24-80

k e

h o b e e



OSCEOLA FARMS CO. PAHOKEE, FLA.

SCALE:

APPROVED BY:

DRAWN BY

DATE: 5-25-81

REVISED

PLANT LOCATION MAP

Kleeman Engineering, Inc. Ft. Lauderdale

DRAWING NUMBER

LAKE
OKEECHOBEE

OSCEOLA FARMS CO.
PAHOKEE, FLA.

LOCATION OF OSCEOLA FARMS WITH RESPECT
TO SURROUNDING AREA

JUPITER

CANAL POINT

⊗ OSCEOLA FARMS

PAHOKEE

717

441

717

BELLE GLADE

441

SOUTH BAY

27

98
W.P.B. CANAL

OCEAN CANAL

441
W.P.B. CANAL

710

FLA. TURNPIKE

WEST
PALM
BEACH

LAKE WORTH

LANTANA

BOYNTON

DELRAY

SCALE 0 1 2 3 4 5 MILES

HILLSBORO CANAL

441

309

1

ATLANTIC OCEAN



DER

NOV 14 1985

BAQM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

Source Type: Air Pollution ☒ Incinerator ☐
Type application: ☐ Operation ☒ Construction
Source Status: ☒ New ☐ Existing ☐ Modification
Company Name: Osceola Farms Co. County: Palm Beach
Source Identification: Boiler #6 Mfg. by Alpha Boiler Co.
Source Location: Street: U.S. Rte. 98 City: 6 mi. E. of Pahokee
UTM: East 7,544,200 North 2,968,000
Appl. Name and Title: Alberto S. Recio, Gen. Mgr.
Appl. Address: P.O. Box 679 Pahokee, Fla. 33476

STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative of Osceola Farms Co.
I certify that the statements made in this application for a Construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules and regulations of the Department and revisions thereof. I also understand that a permit, if granted by the Department, will be nontransferable and I will promptly notify the Department upon sale or legal transfer of the permitted establishment.

(signed) Alberto S. Recio, Gen. Mgr.

Signature of the Owner or Authorized Representative and Title

Date: February 20, 1979 Telephone No.: (305) 924-7391

*Attach a letter of authorization. If applicant is a corporation, a Certificate of Good Standing must be submitted with application. This may be obtained for a \$5.00 charge from the Secretary of State, Bureau of Corporate Records, Tallahassee, Florida 32304.

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulation of the Department. It is also agreed that the undersigned will furnish the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signature: Frank S. KleemanName: Frank S. Kleeman, P.E.
(Please Type)Company Name: Kleeman Engineering, Inc.Florida Registration Number: 13622

Mailing Address: _____

404 N. Andrews Ave.Ft. Lauderdale, Fla. 33301Telephone No.: (305) 467-6708Date: February 20, 1979

(Affix Seal)

DETAILED DESCRIPTION OF SOURCE

- A. Describe the nature and extent of the project. Refer to existing pollution control facilities, expected improvement in performance of the facilities and state whether the project will result in full compliance. Attach additional sheet if necessary.

This project involves the installation of a new 125,000 lbs. per hr. Boiler #6. This Boiler is intended to burn only bagasse as fuel, but is equipped to burn fuel oil also, if required.

The pollution control facilities for the boiler will consist of two No. 48 Type D wet scrubbers, and will be the same as those presently installed on Boilers #4 and 5.

The facility will operate in full compliance with the applicable air pollution emissions standard.

- B. Schedule of Project Covered in this Application (Construction Permit Application Only).

Start of Construction: (est.) 8-1-79
Completion of Construction: 10-15-79

- C. Costs of Construction (Show a breakdown of estimated costs for individual components/units of the project serving pollution control purpose only). Information on actual costs shall be furnished with the application for operation permit.

Equipment	\$24,000
Installation	50,000
Total	\$74,000

- D. For this source indicate any previous DER permits, orders, and notices; including issuance dates and expiration dates.

No previous permits

- E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? Yes X No

AIR POLLUTION SOURCES & CONTROL DEVICES
(other than incinerators)

A. Identification of Air Contaminants:

- 1) ☒ Particulates
a) ☐ Dust b) ☒ Fly Ash c) ☒ Smoke d) ☐ Other (Identify)
- 2) ☒ Sulfur Compounds
a) ☒ SO_x as SO₂ b) ☐ Reduced Sulfur as H₂S c) ☐ Other (Identify)
- 3) ☒ Nitrogen Compounds
a) ☒ NO_x as NO₂ b) ☐ NH₃ c) ☐ Other (Identify)
- 4) ☐ Fluorides 5) ☐ Acid Mist 6) ☐ Odor
- 7) ☐ Hydrocarbons 8) ☐ Volatile Organic Compounds
- 9) ☐ Other (Specify): _____

B. Raw Materials and Chemicals Used (Be Specific):

Description	Utilization Rate lbs./hr.	Approximate Contaminant Content		Relate to Flow Diagram
		Type	% Wt.	
Bagasse	63,810	S	0.05	A
Fuel Oil #6	160	S	2.3	B

C. Process Rate:

- 1) Total Process Input Rate (Units*): 63,970 lbs/hr
2) Product Weight (Units*): 125,000 lbs/hr steam
3) Normal Operating Time: Approx. 125 days/yr if seasonal describe: Nov. 1 to March 5
hrs./day: 24 days/wk.: 7 wks/yr.: 18

D. Airborne Contaminants Discharged:

Name of Contaminant	Actual** Discharge		Discharge Criteria Rate*	Allowable Discharge lbs./hr.	Relate to Flow Diagram
	lbs./hr.	T/yr.			
Particulates	43.4	65.1	0.2 #/M Btu	46.2	C
SO ₂	39.3	59.0	N.A.	N.A.	C
NO _x	71.0	106.5	N.A.	N.A.	C

*Refer to Chapter 17-2.04(2), Florida Administrative Code.

(Discharge Criteria: Rate = lbs./ton P₂O₅, lbs./M BTU/hr., etc.)

**Estimate only if this is an application to construct.

E. Control Devices:

Name and Type (Model and Serial No.)	Contaminant	Efficiency*	Conditions of Operations	Basis for Efficiency Operational Data, Test, Design, Data
Osceola - Impingement-			Particle Size	
Type Wet Scrubber			5% under 10 microns	
	Particulates	93.9%	20% " 20 "	
Model No. 48-D			75% over 20 "	
Serial Nos. 102 & 103				Operation data from Boiler #5 (see attached calculation sheet)

*See required supplement.
(Include any test data and/or design data for efficiency substantiation)

F. Fuels:

Type (Be Specific)	Consumption*		Maximum Heat Input MMBTU/hr.
	Avg./hr.	Max./hr.	
Bagasse	63,810	64,640	232.7
No. 6 Fuel Oil	160	200	3.8

*Units: Natural Gas - MCG/hr.; Fuel Oils, Coal - lbs./hr.

Fuel Analysis:

Percent Sulfur: 2.3 Percent Ash: 0.05
 Density: 7.85 lb./gal.
 Heat Capacity: 18,850 BTU/lb. 147,970 BTU/gal.
 Other Fuel Contaminants: -

G. Indicate liquid or solid wastes generated and method of disposal:

N.A.

H. Emission Stack Geometry and Flow Characteristics, (provide data for each stack):

Stack Height: 72 ft. Stack Diameter: 5 ft.
 Gas Flow Rate: 110,000 ACFM Gas Exit Temperature: 130 °F
 Water Vapor Content: 20 %



Kleeman Engineering, Inc.

404 N. ANDREWS AVE. FT. LAUDERDALE, FLA. 33301

CHEMICAL & ENVIRONMENTAL ENGINEERS

(305) 467-6708

ADDENDUM CALCULATIONS APPLICATION FOR PERMIT TO CONSTRUCT

FOR: OSCEOLA FARMS Co.
BOILER #6

Item C-1 Derivation of Process Weight

Fuel Oil Burned (# 6) 160 lbs./ hr.

Bagasse Burned 63810 lbs./hr.

Calculated on Btu basis as follows:

Steam Generated 125,000 lbs/hr.

Btu Value of Steam 1024 Btu/lb.

Btu Value of Fuel Oil 18850 Btu/lb.

Furnace Efficiency 55 %

Btu Value of Bagasse 3600 Btu/lb.

Heat Output = 125,000 x 1024 = 128.0×10^6 Btu/hr.

Heat Input = 128.0×10^6 = 232.7×10^6 Btu/hr.

Heat Input from Oil = 160 x 18,850 = 3.0×10^6 Btu/hr.

Heat Input from Bagasse = 232.7×10^6 + 3.0×10^6 = 239.7×10^6 Btu/hr.

Bagasse Burned = 229,700,000 = 63,810 Lbs/hr.

Total Process Weight = $\frac{3600}{63,810}$ + 160 = 63,970 Lbs/hr.

Bagasse Burned Daily = $\frac{63,810 \times 24}{2000}$ = 765.7 Tons/day

Oil Burned Daily = $\frac{160 \times 24}{2000}$ = 1.9 Tons/day

Section D Emissions CalculationsParticulate Emissions:

Stack tests were conducted on Boiler #5 on 1-31 + 2-1-79
by So. FLA. ENV. TESTING.

			Lbs/hr	
Particulate emissions were determined as follows:			Steam Generated	Oil Used
Run No. <u>1</u>	<u>38.0</u> lbs/hr		101,130	0
Run No. <u>2</u>	<u>32.8</u> " "		100,960	0
Run No. <u>3</u>	<u>34.4</u> " "		100,960	0
Average	<u>35.1</u> lbs/hr		101,000	0

$$\frac{35.1}{101,000} \times \frac{125,000}{1} = 43.4 \text{ lbs/hr @ } 125,000 \text{ lbs/hr design Cap. STEAM}$$

$$\frac{43.4 \times 24 \times 125}{2000} = 65.1 \text{ Tons/yr Particulates}$$

Sulfur Oxide Emissions:

$$\text{From Bagasse } \frac{63,810 \text{ lbs/hr} \times 0.05 \%S}{1} = 31.9 \text{ lbs/hr SO}_2$$

$$\frac{31.9 \times 24 \times 125}{2000} = 47.9 \text{ tons/yr SO}_2$$

From Fuel Oil (Dept. HEW Pub. No. AP-52, p. 106)

$$\text{Lbs. SO}_2 \text{ per 1000 gals. oil burned} = 158.8 \times \%S \text{ of oil}$$

$$\frac{1000 \times 7.85 \text{ lbs/gal} \times 158.8 \times 2.3}{1} = 7.4 \text{ lbs/hr SO}_2$$

$$\frac{7.4 \times 24 \times 125}{2000} = 11.1 \text{ tons/yr SO}_2$$

$$\text{Total SO}_2 \text{ emissions } \frac{31.9 + 7.4}{1} = 39.3 \text{ lbs/hr}$$

$$\frac{47.9 + 11.1}{1} = 59.0 \text{ tons/yr}$$

NO_x Emissions:

$$\text{From Bagasse} = 0.3 \text{ lb/ } 10^6 \text{ Btu heat input}$$

$$\frac{229.7}{1} \times 0.3 = 68.9 \text{ lbs/hr NO}_x$$

$$\frac{68.9 \times 24 \times 125}{2000} = 103.4 \text{ tons/yr NO}_x$$

NO_x Emissions:

From Oil (76 Fuel Oil) = 104 lbs/1000 gal. (TDS Pub. 999-A1-89)

$$\frac{160}{7.85 \text{ lbs/gal}} = 20.4 \text{ gal/hr Oil Used}$$

$$\frac{20.4}{1000} \times 104 = 2.1 \text{ lbs/hr NO}_x$$

$$\frac{2.1 \times 24 \times 125}{2000} = 3.2 \text{ tons/yr NO}_x$$

$$\text{Total NO}_x \text{ emissions } \frac{68.9 + 2.1}{2000} = 71.0 \text{ lbs/hr}$$

$$\frac{71.0 \times 24 \times 125}{2000} = 106.6 \text{ tons/yr}$$

Section E Calculation of Scrubber Efficiency

Inlet particulates loading to the scrubber was calculated utilizing emission tests performed on

Boiler #4 by ENVIRONMENTAL ENG. on DURING 1969-70 GRINDING SEASON

Test No. _____ Date _____ lbs/hr

Test No. _____ Date _____ lbs/hr

Test No. _____ Date _____ lbs/hr

Average (at 96,000 lbs/hr steam prod.) 550 lbs/hr

Average emissions from (Boiler #5) scrubber 35.1 lbs/hr @ 101,000 lbs/hr steam production.

$$35.1 \times \frac{96,000}{101,000} = 33.3 \text{ LBS/HR AT 96,000 LBS/HR STEAM PROD.}$$

$$\text{Scrubber Efficiency} = \frac{550 - 33.3}{550} \times 100$$

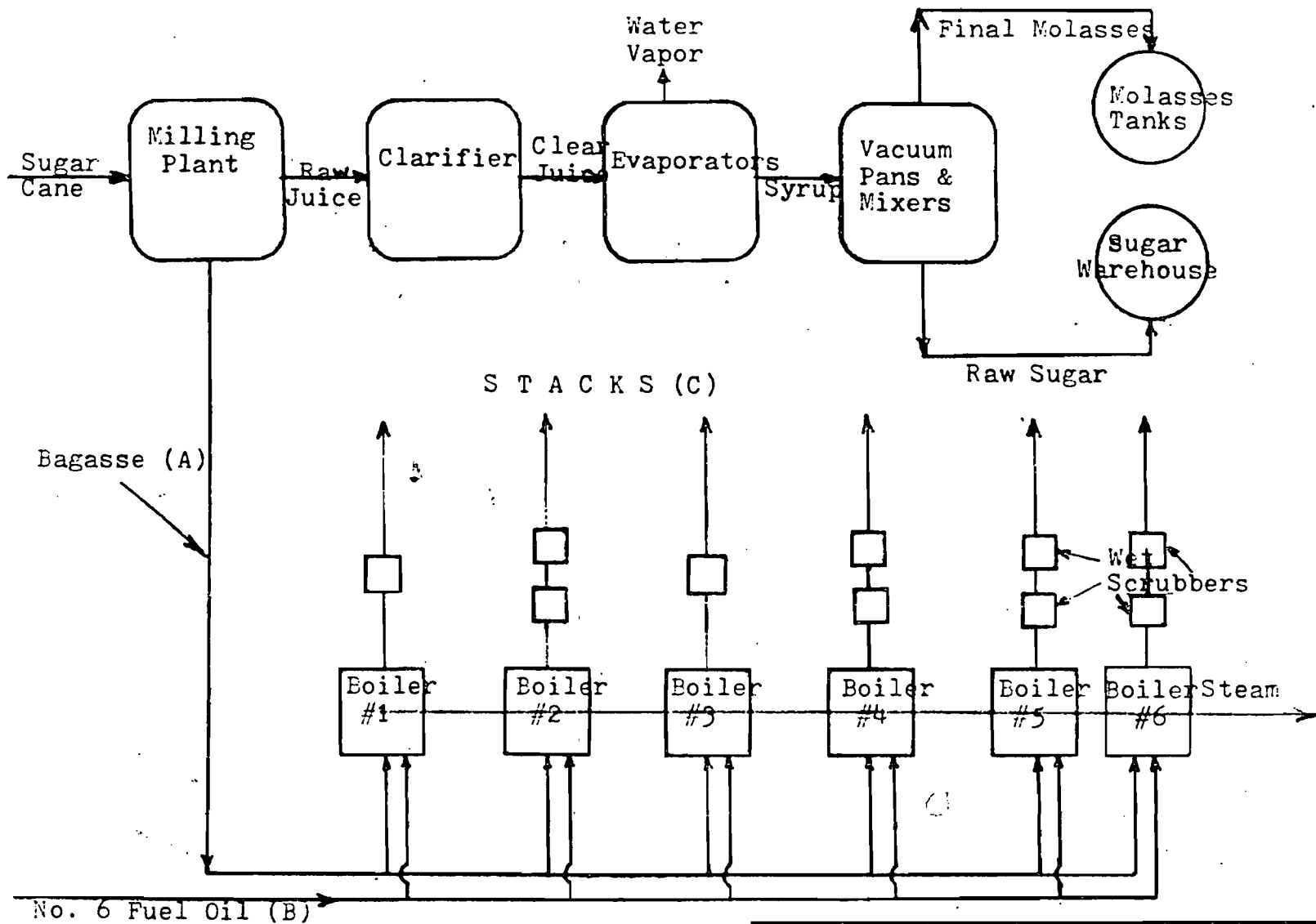
$$= 93.9 \%$$

USCEOLA FARMS Co.
Boiler #6

CALCULATION SHEET

ALLOWABLE EMISSIONS

Total Btu value of steam	360°F 165 PSIA	=	1193	Btu/lb
Btu value of feed water	200°F 255 PSIA	=	169	Btu/lb
Net Btu value of steam		=	1024	Btu/lb
Steam production rate		=	125,000	lb/hr
Furnace efficiency		=	55	%
Heat input to furnace	$\frac{125,000 \times 1024}{.55}$	=	232.7×10^6	Btu/hr
Heat input from fuel oil	$\frac{148,000}{(\text{Btu/gal})} \times \frac{20.4}{(\text{gal/hr})}$	=	3.0×10^6	Btu/hr
Heat input from bagasse		=	229.7×10^6	Btu/hr
Allowable particulates for oil	$3.0 \times 0.1 / 10^6$ Btu	=	0.3	lb/hr
Allowable particulates for bagasse (new boilers)	$229.7 \times 0.2 / 10^6$ Btu	=	45.9	lb/hr
Allowable particulates for bagasse (existing boilers)	$\quad \times 0.3 / 10^6$ Btu	=	-	lb/hr
Total allowable particulates			46.2	lb/hr



Osceola Farms Co.
Pahokee, Fla.

SCALE: None

APPROVED BY:

DRAWN BY

DATE: 2-24-79

REVISED

SCHEMATIC PROCESS FLOW DIAGRAM

KLEEMAN ENGINEERING, INC.
404 N. Andrews Ave. Ft. Lauderdale, Fla.

DRAWING NUMBER

Osceola Farms Co.
Vermilion Sugar Factory
Pahokee, Fla.

GUARD HOUSE

24x10

CHEMICAL

STORAGE STACKS

B6

B5

B4

MILL BUILDING

246'

WATER
TANK

VIOLETT
STORAGE TANK
75' DIA

A.C.
TANK

MAIN CANE CARRIER

CANE DUMP

CANE STORAGE

CANE DUMP

CHAIN

150'

ION
16'-45'

LAKE
OKEECHOBEE

OSCEOLA FARMS CO.
PAHOKEE, FLA.

LOCATION OF OSCEOLA FARMS WITH RESPECT
TO SURROUNDING AREA

JUPITER

FLA. TURNPIKE

WEST
PALM
BEACH

LAKE WORTH

LANTANA

BOYNTON

PELHAM

CANAL POINT

OSCEOLA FARMS

PAHOKEE

BELLE GLADE

SOUTH BAY

OCEAN CANAL

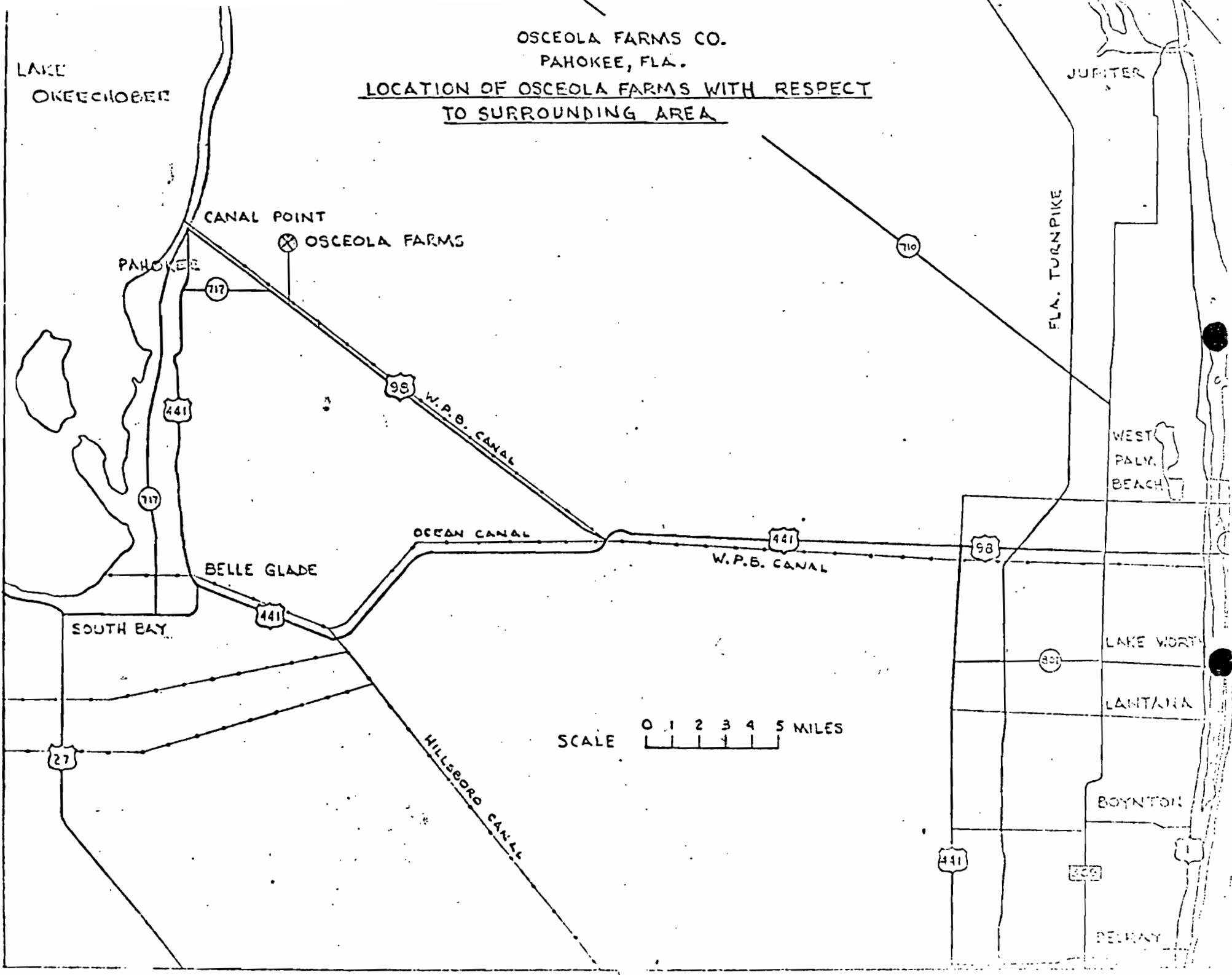
HILLSBORO CANAL

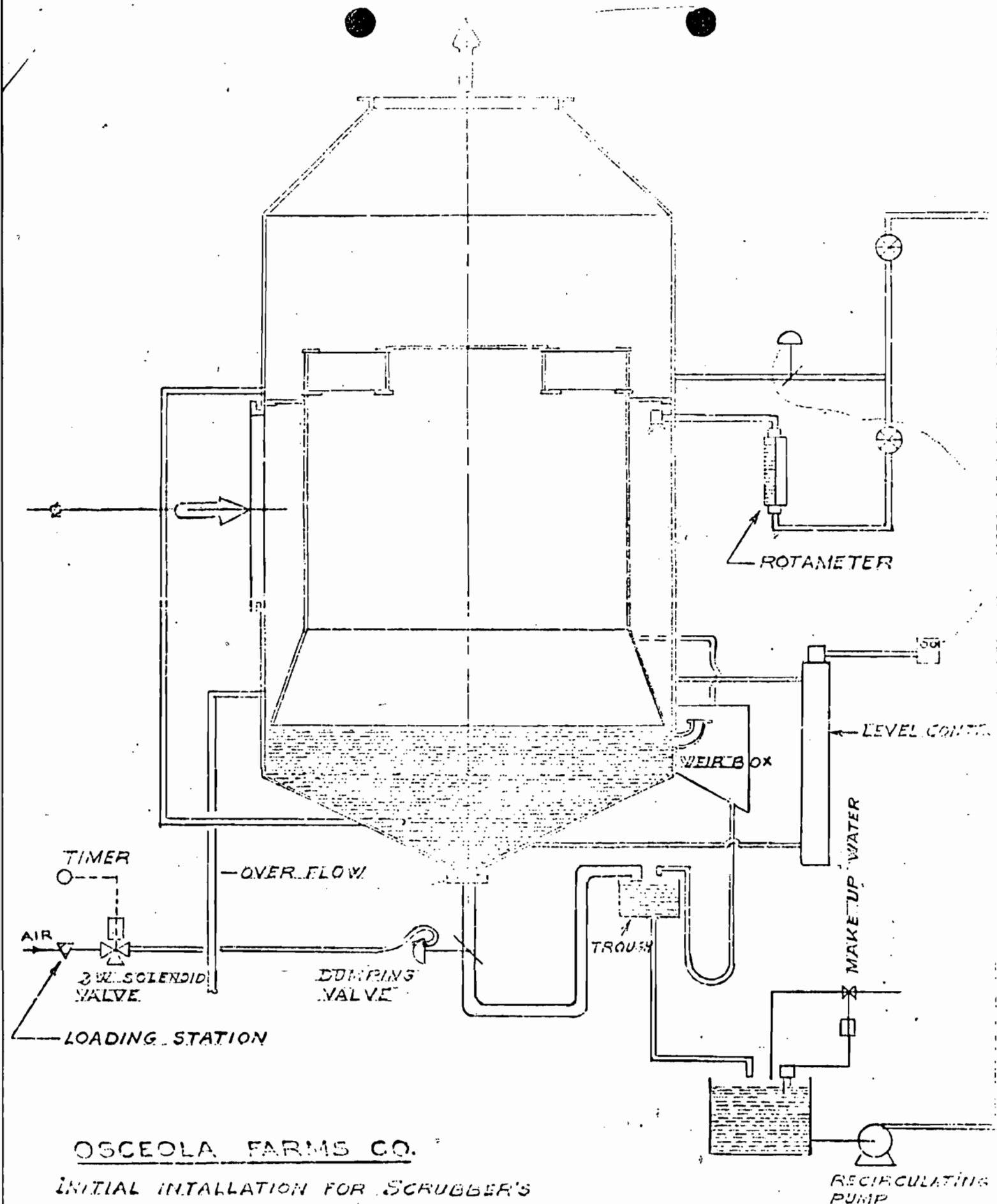
W.P.B. CANAL

W.P.B. CANAL

SCALE

0 1 2 3 4 5 MILES





OSCEOLA FARMS CO.

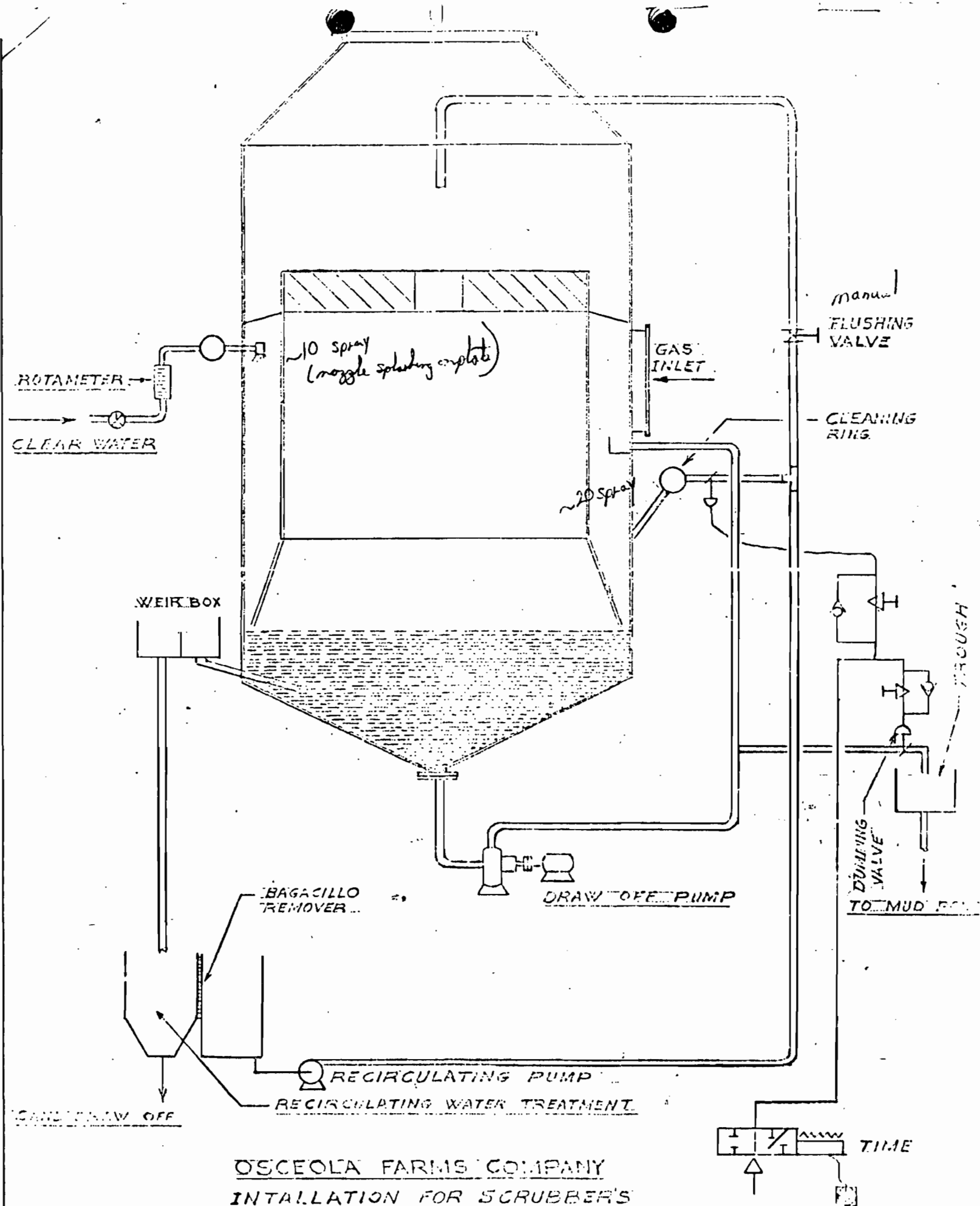
INITIAL INSTALLATION FOR SCRUBBER'S

INST. C.M.A.

6-10-74

DRAWING BY R. LOPEZ

RECIRCULATING
PUMP



OSCEOLA FARMS COMPANY
INSTALLATION FOR SCRUBBER'S

OSCEOLA FARMS CO.
SCRUBBER-BOILER N°6

SCRUBBER

LOCK

To Scrubber

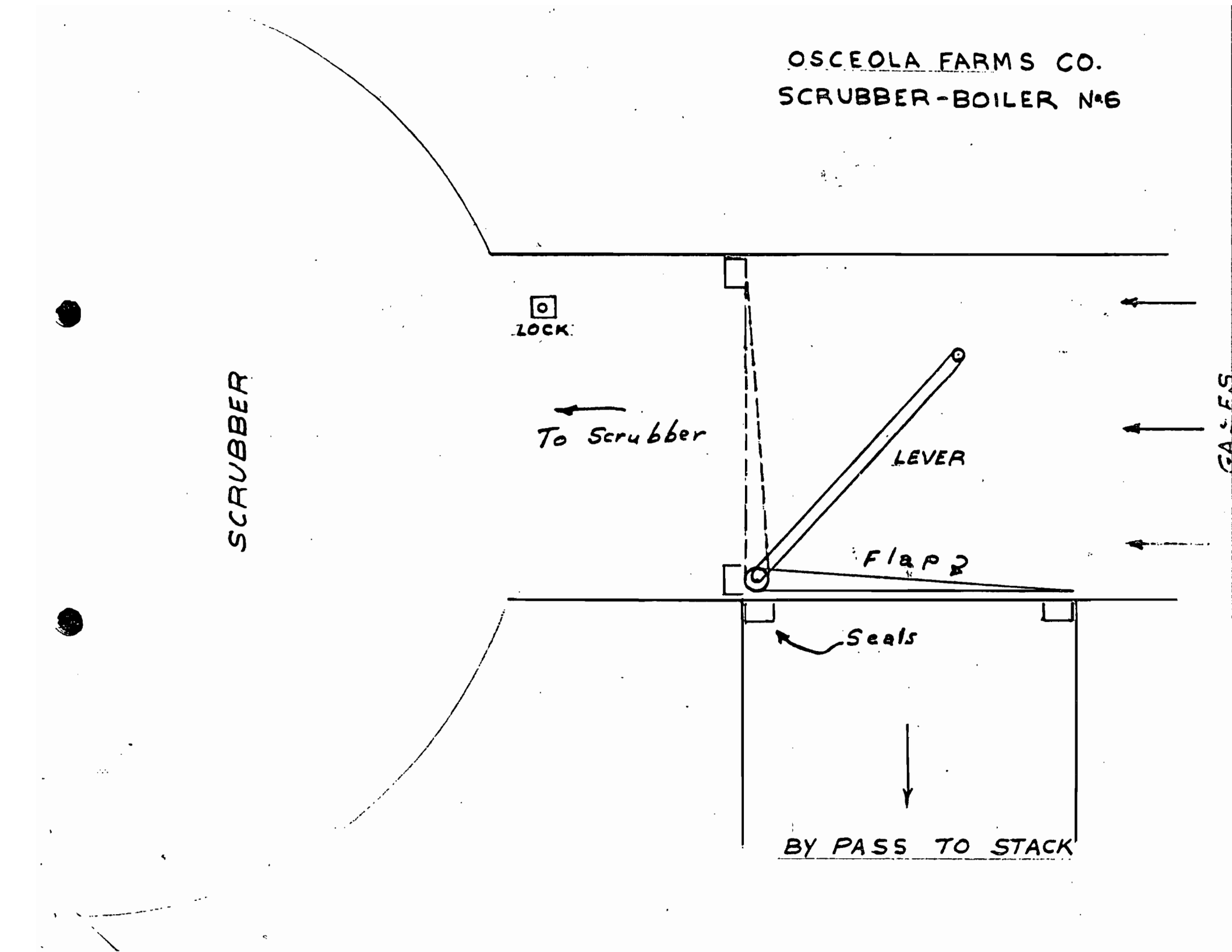
LEVER

Flap

Seals

BY PASS TO STACK

GASES



PREDICTED PERFORMANCE DATA

(BAGASSE Fuel)

Steam output	<u>125,000</u> lbs./hr.
Steam pressure at <u>SUPERHEATER</u> outlet ...	<u>200</u> psig
Steam temperature at <u>SUPERHEATER</u> outlet ...	<u>500</u> °F.
Feed water temperature(assumed) ..	<u>212</u> °F.
Steam pressure drop through superheater	<u>20</u> psig
Ambient air temperature	<u>80</u> °F.
Temperature of gas leaving boiler	<u>642</u> °F.
Temperature of gas leaving air preheater	<u>444</u> °F.
Temperature of air leaving air preheater into furnace ..	<u>426</u> °F.
Heat in steam	<u>1,267</u> BTU/lb.
Net heat in steam	<u>1,087</u> BTU/lb.
Gross heat liberation	<u>229,131,535</u> BTU/hr.
Heat absorbed by boiler	<u>131,875,000</u> BTU/hr.
H ₂ O in fuel (bagasse)	<u>56</u> %
Heat value of fuel (as fired)	<u>3,652</u> BTU/lb.
Heat value of fuel (dry)	<u>8,300</u> BTU/lb.
Excess air <u>50</u> % CO ₂	<u>13.4</u> %
Weight of combustion air per lb. of dry fuel	<u>8.85</u> lbs.
Weight of flue gas per lb. of dry fuel	<u>11.15</u> lbs.
Weight of combustion air	<u>244,315</u> lbs./hr.
Volume of combustion air (@ <u>.0736</u> density) net	<u>55,337</u> CFM
Test block (x 1.2 =)	<u>66,405</u> CFM
Weight of flue gas	<u>307,807</u> lbs./hr.
Volume of flue gas (@ <u>.0410</u> density) net	<u>125,175</u> CFM
Test block (x 1.2 =)	<u>150,210</u> CFM
Weight dry fuel	<u>27,606</u> lbs./hr.
Weight wet fuel	<u>62,741</u> lbs./hr.

THREE-DRUM ALPHA STEAM GENERATOR

ANNEX I

DESIGN, CONSTRUCTION AND PREDICTED PERFORMANCE DATA

MODEL CNH-48-26FRONT AND STEAM DRUMS SUPPORTED
FROM BOILER STEEL STRUCTURE

Maximum continuous steam capacity 125,000 lbs./hr. (bagasse)
 Maximum continuous steam capacity 62,500 lbs./hr. (oil)
 Maximum peak steam capacity ----- lbs./hr. (combination oil & bagasse)
 Design pressure 250 psig Operating pressure 200 psig
 Steam temperature 500 °F. (= 112 °F. superheat)
 Feed water temperature 212 °F.
 Ambient air temperature 80 °F.
 Elevation above sea level less than 100 ft.

BOILER HEATING SURFACE

Boiler convection area (full circumference) 19,722 sq. ft.
 Boiler water walls (" ") -- sq. ft. (= -- sq. ft. flat projected area)
 Total boiler heating surface (" ") 19,722 sq. ft.

BOILER DRUM DATA
(Material SA-515-70)

	Steam Drum	Front Drum	Mud Drum
Inside diameter	<u>48</u> in.	<u>42</u> in.	<u>42</u> in.
Length tang.-tang.	<u>27</u> ft. <u>2</u> in.	<u>27</u> ft. <u>2</u> in.	<u>25</u> ft. <u>0</u> in.
Shell thickness	<u>13/16</u> in.	<u>11/16</u> in.	<u>3/4</u> in.
Head thickness	<u>3/4</u> in.	<u>11/16</u> in.	<u>3/4</u> in.

Steam drum shall be provided with 3 Type BI-10 V.D. Anderson or equal steam purifiers discharging into a pressure tight steam chamber at outlet nozzle.

Drum internals are designed for effective steam separation and minimum pressure drop.

All drums shall be provided with 12" x 16" manholes in each end.

FORCED DRAFT LOSSES

Air preheater	<u>3.0</u>
Stoker or cells	<u>3.0</u>
Ducts	<u>1.0</u>
Other	<u> </u>
Total H ₂ O net	<u>7.0</u>
Total H ₂ O test block (x 1.32 =)	<u>9.24</u>

INDUCED DRAFT LOSSES

Furnace	<u>0.4</u>
Boiler and superheater	<u>2.5</u>
Air preheater	<u>3.0</u>
Dust collector	<u>--</u>
Ducts up to ID Fan	<u>1.0</u>
Other Scrubber	<u>6.0</u>
Total H ₂ O net	<u>12.9</u>
Total H ₂ O test block (x 1.32 =)	<u>17.03</u>

HEAT BALANCE

Losses	Fuel	Fuel
	Bagasse	
Dry chimney gas	<u>9 . 6%</u>	<u> </u> %
Water in fuel	<u>18 . 6%</u>	<u> </u> %
Hydrogen in fuel	<u>8 . 0%</u>	<u> </u> %
Moisture in air	<u>0 . 2%</u>	<u> </u> %
Unburned carbon	<u>2 . 0%</u>	<u> </u> %
Radiation	<u>0 . 8%</u>	<u> </u> %
Unaccounted for	<u>1 . 5%</u>	<u> </u> %
Absorbed by boiler (efficiency)	<u>59 . 3%</u>	<u> </u> %
	<u>100.00 %</u>	<u>100.00 %</u>