

Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT

Mr. J. Franklin Mixson General Manager and V.P. Jefferson Smurfit Corporation 1915 Wigmore Street Jacksonville, Florida 32201

July 12, 1990

Enclosed is construction permit No. AC 16-142989 for Jefferson Smurfit Corporation to allow an increase in production capacity from 220 TPD to 275 TPD for the No. 3 lime kiln at your existing facility located in Jacksonville, Duval 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

CA H. Fancy, P.E.

Chief

Bureau of Air Regulation

Copy furnished to:

Andy Kutyna, NE Dist. Ron Roberson, BESD Terry Cole, OHF&C Jerry Cox, JSC David Buff, P.E., KBN

CERTIFICATE OF SERVICE

The	unde	ersign	ned di	ıly	designa	ted	dep	uty c	lerk	hereby
certifies	that	this	NOTICE	OF	PERMIT	and	all	copies	were	mailed
before the	clos	e of 1	buisnes	s on		7-12	2-9	0		•

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to $\S120.52(9)$, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Date

Final Determination

Jefferson Smurfit Corporation
Duval County
Jacksonville, Florida

Construction Permit Number: AC 16-142989

Department of Environmental Regulation Division of Air Resources Management Bureau of Air Regulation

Final Determination

The construction permit application package has been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in the Florida Times-Union on June 20, 1990. The Technical Evaluation and Preliminary Determination were available for public inspection at the Department's Northeast District and Bureau of Air Regulation (Bureau) offices and the Duval County's Bio-Environmental Services Division office.

Comments were received on the proposed action from Mr. J. Franklin Mixson, V.P. and General Manager of Jefferson Smurfit Corporation-Jacksonville mill, in a letter with an attachment received on June 28, 1990. A comment was also received from Mr. Terry Cole, with Oertel, Hoffman, Fernandez & Cole, by phone on June 3, 1990. The Bureau's response to the comments are as follows:

A. Comments from Mr. J. Franklin Mixson:

Jefferson Smurfit Corporation requests that the No. 3 lime kiln be also permitted to fire natural gas if it becomes available.

o Bureau's Response:

Since the potential pollutant emissions while firing natural gas will not exceed the projected potential emissions and the net potential pollutant changes have been reviewed and noticed, the Bureau agrees with the request. It is noted that there is an error in the calculations for particulate matter (PM) and PM_{10} , which was discussed with Mr. Gene Tonn by phone on July 9, 1990 (see Interoffice Memorandum dated July 9, 1990). Therefore, the following will be changed and added:

Specific Condition No. 8

Particulate matter emissions from the lime kiln shall FROM: not exceed 0.24 g/dscm (0.104 gr/dscf; 21.0 lbs/hr, 93.2 TPY) corrected to 10 percent oxygen, when liquid F.A.C. fossil fuel is burned pursuant to CFR 60.282(a)(3)(ii). 17-2.660(2)(a); 40 and, compliance test for particulate matter emissions shall be conducted using EPA Method 5, EPA Method 1, EPA Method 2 and EPA Method 3 pursuant to F.A.C. Rules 17-2.660(2)(b), 17-2.660(3)(b), 17-2.660(4)(a) 17-2.700 Table I; and, 40 CFR 60.285(a)(1) through (4) and 40 CFR 60.285(b).

TO: Particulate matter emissions from the lime kiln shall not exceed 0.24 g/dscm (0.104 gr/dscf; 21.0 lbs/hr, 93.2 TPY) corrected to 10 percent oxygen, when liquid

fossil fuel is burned pursuant to F.A.C. Rule 17-2.660(2)(a); and, 40 CFR 60.282(a)(3)(ii). Particulate matter emissions from the lime kiln shall not exceed 0.15 g/dscm (0.067 gr/dscf; 13.0 lbs/hr, 56.9 TPY) corrected to 10 percent oxygen, when gaseous fossil fuel is burned pursuant to F.A.C. Rule 17-2.660(2)(a); and, 40 CFR 60.282(a)(3)(i). A compliance test for particulate matter emissions shall be conducted using EPA Method 5, EPA Method 1, EPA Method 2 and EPA Method 3 pursuant to F.A.C. Rules 17-2.660(2)(b), 17-2.660(3)(b), 17-2.660(4)(a) and 17-2.700 Table I; and, 40 CFR 60.285(a)(1) through (4) and 40 CFR 60.285(b).

B. Response from Mr. Terry Cole:

Since the applicability section of F.A.C. Rule 17-2.650(2)(a) associated with new and modified sources was deleted from rule on May 30, 1988, then the visible emission standard contained in F.A.C. Rule 17-2.650(2)(c)9.b. does not apply.

o Bureau's response:

The Bureau agrees with the comment. However, the "General Visible Emissions Standard" pursuant to F.A.C. Rule 17-2.610(2) does apply. Therefore, the following will be changed and added:

Specific Condition No. 4

FROM: Visible emissions from the lime kiln shall not exceed 10 percent opacity pursuant to F.A.C. Rule 17-2.650(2)(c)9.b. Compliance tests shall be measured by EPA Method 9 pursuant to F.A.C. Rule 17-2.700 Table I.

TO: Visible emissions from the lime kiln shall be less than 20 percent opacity pursuant to F.A.C. Rule 17-2.610(2). Compliance tests shall be measured by EPA Method 9 pursuant to F.A.C. Rule 17-2.700 Table I.

Attachments to be Incorporated:

- 15. Mr. J. Franklin Mixson's letter with an attachment received June 28, 1990.
- 16. Mr. R. Bruce Mitchell's Interoffice Memorandum dated July 9, 1990.

The Bureau will incorporate the changes into the appropriate area of the proposed permit, as reflected above in the Final Determination. It is recommended that the proposed permit be issued as drafted, with the above revisions and attachments incorporated.

JEFFERSON SMURFIT CORPORATION



401 ALTON STREET, P.O. BOX 276

ALTON, ILLINOIS 62002-2276

818/483-8000

June 27, 1990

Reply to: Containerboard Mill Division

1916 WIGMORE STREET

P.O. BOX 150

Submitted by Facsimile Transmission: 6-27-90

Followed by Federal Express:

6-27-90

JACKSONVILLE, FL 32201

TELEPHONE: 904/353-3611

Mr. Clair Fancy, P.E., Chief Bureau of Air Regulation Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

SUBJECT:

JEFFERSON SMURFIT CORPORATION

CAUSTICIZING SYSTEM

CONSTRUCTION PERMIT NO. AC16-142989

RECEIVED JUN 27 1990 DER. BAOM

Dear Mr. Fancy:

In regard to the subject permit, attached is the proof of publication of the "Notice of Intent to Issue Permit", published in the legal ad section of the Florida Times-Union on Wednesday, June 20, 1990, as required by Section 403.815, F.S. and DER Rule 17-103.150, F.A.C.

Should there be any question, please call Gene Tonn at (904) 353-3611.

Very truly yours,

Franklin Mixson

General Manager & Vice President

Best Available Copy

FLORIDA PUBLISHING COMPANY

Publisher

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORII	DA
COUNTY OF DUV	AL

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Before the undersigned authority personally appeared	
M. Lanehart	who on oath says that he is
Legal Advertising Assistant	_ of The Florida Times Union,
a daily newspaper published at Jacksonville in Duv attached copy of advertisement, being a Leg	al County, Florida; that the
in the matter of <u>Department of Environm</u>	ental Regulation
in thewas published in THE FLORIDA TIMES-UNION in the	Court,
	165463 07
June 20, 1990	
•	
Affiant further says that the said The Florida Times Union is a new aid Duval County, Florida, and that the said newspaper has heretogid Duval County, Florida, The Florida Times Union each day, has natter at the postoffice in Jacksonville, in said Duval County, receeding the first publication of the attached copy of advertisement; either paid nor promised any person, firm or corporation any discounted purpose of securing this advertisement for publication in said newspapers.	nt, repare, commusción or retuna for
worn to and subscribed before me his 26th day of June Notary Public, State of Florida at Large.	anelart_
y Commission Expires Konary Public, Stave of Fioride A 422 Commission Expires Feb. 7, 1994	





JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276

ALTON, ILLINOIS 62002-2276

618/463-6000

June 27, 1990

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

P.O. BOX 150

JACKSONVILLE, FL 32201

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

TELEPHONE: 904/353-3611

Mr. C. H. Fancy, P.E. Chief, Bureau of Air Regulations Florida Department of Environmental Regulation 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

RECEIVI

JUN 28 1990

SUBJECT:

APPLICATION TO MODIFY/CONSTRUCT

PERMIT NO. AC16-142989

NO. 3 LIME KILN

JEFFERSON SMURFIT CORPORATION

DER - BAOM

Dear Mr. Fancy:

Attached are supporting calculations for proposed PM and PM10 emissions from the No. 3 Lime Kiln when gaseous fossil fuel is burned.

Applicant requests that particulate emission limitations be provided in the subject permit for burning gaseous fossil fuel should natural gas become a fuel for use in the Lime Kiln.

Should additional information be required, please call Gene Tonn at (904) 353-3611.

Very truly yours.

Franklin Mixson

Vice President & General Manager

B. Mitchell, DER

R. Roberson, BESD

A. Kutyna, P.E., DER

CR# P 041 811 816

td/LKMODREV

SUPPORTING CALCULATIONS JEFFERSON SMURFIT CORPORATION NO. 3 LIME KILN PERMIT NO. AC16-142989

Proposed PM Emissions When Gaseous Fossil Fuel is Burned:

AT: 275 TON CaO/DAY

6.29 MM BTU/TON CaO

2% 02 IN STACK

13,575 DSCF CO2/TON CaO

.067 GRS/DSCF PARTICULATE

DSCFM FROM CaO = $\frac{275 \text{ TON CaO/DAY X } 13,575 \text{ DSCF CO2/TON CaO}}{1440 \text{ MIN./DAY}} = 2,592 \text{ DSCFM}$

DSCFM FROM GAS @ 0% 02 =

DSCFM AT STACK CONDITIONS OF 2% 02 =

 $\frac{13,091 \text{ DSCFM} \times (21\% - 0\%)}{(21\% - 2\%)} = 14,469 \text{ DSCFN } @ 2\% 02$

CALCULATED TO 10% O2 = 14,469 DSCFM X (21% - 0%) = 24,992 DSCFM @ 10% 02 (21% - 10%)

24,992 DSCFM X .067 GR/DSCF * X <u>LB</u> X <u>60 MIN.</u> = 14.35 LBS/HR.

14.35 LBS/HR X $\frac{8760 \text{ HRS}}{\text{YR}}$ X $\frac{\text{TON}}{2000 \text{ LBS}}$ = 62.85 TPY

*EQUIVALENT TO 0.15 g/dscm

PM10

That fraction of PM which has an aerodynamic particle size diameter of 10 um and less is referred to as PM10. AP-42, Section 10.1, Chemical Wood Pulping (10/86), contains information related to PM10 emissions from lime kilns. The AP-42 data show that PM10 emissions from such sources represent 98.3% of PM emissions.

Proposed PM10 Emission When Gaseous Fossil Fuel is Burned

Annual Emissions = $62.85 \text{ TPY} \times 0.983 = 61.78 \text{ TPY}$

ATTACHMENT 16



State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee						
To:		Location:				
То:		Location:				
То:		Location:				
From:		Oate:				

Interoffice Memorandum

TO: File: Jefferson Smurfit Corporation

AC 16-142989

FROM: R. Bruce Mitchell

DATE: July 9, 1990

SUBJ: PM and PM₁₀ Emissions Calculation Correction

The letter from Mr. J. Franklin Mixson, received June 28, 1990, had an attachment that contained the calculations for PM and PM_{10} associated with natural gas firing in the No. 3 lime kiln. In a discussion, on June 9, 1990, with Mr. Gene Tonn, who is with Jefferson Smurfit Corporation, it was noted that there was an error in the calculations. The corrections will follow:

PM

13,091 dscfm x (21% - 2%)/(21% - 10%) = 22,612 dscfm @ 10% O_2

22,612 dscfm x 0.067 gr/dscf x 1 lb/7000 gr x 60 min/hr = 13.00 lbs/hr

@ 8760 : 56.94 TPY

<u>PM</u>10

= 98.3% of PM

 $56.94 \text{ TPY } \times 0.983 = 55.97 \text{ TPY}$



Florida Department of Environmental Regulation

Twin Towers Office Eidg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Jefferson Smurfit Corp.
1915 Wigmore Street

1915 Wigmore Street Jacksonville, FL 32201

Permit Number: AC 16-142989

Expiration Date: December 31, 1991

County: Duval

Latitude/Longitude: 30°22'00"N

81°37'30"W

Project: Causticizing System

Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of the existing causticizing system, which will include the following: 1) replace the existing wet scrubber system serving the No. 3 lime kiln with an electrostatic precipitator; 2) increase the maximum operating rate in the No. 3 lime kiln from 220 TPD to 275 TPD lime product; 3) increase the maximum process in-put rate of the lime storage silo from 9.2 TPH to 11.5 TPH lime product from the No. 3 lime kiln; and, increase the maximum process in-put rate of the lime storage silo from 6.00 TPH to 21.2 TPH lime product, either from truck unloading or truck unloading and the No. 3 lime kiln. The existing lime kiln fires No. 6 fuel oil, with a maximum sulfur content of 2.5%, by weight, and has the capability to fire natural gas.

The proposed project will be constructed at the permittee's existing mill located at the above address in Duval County, Florida. The UTM coordinates are Zone 17-439.8 km East and 3359.4 km North.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments to be incorporated:

- 1. Application to Modify Air Pollution Sources, DER Form 17-1.202(1), received December 9, 1987.
- Mr. C. H. Fancy's letter dated January 7, 1988.
- 3. Mr. E. T. Tonn's letter with enclosures received April 24, 1989.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

Attachments Continued:

- 4. Mr. J. Franklin Mixson's letter with attachments received February 5, 1990.
- 5. Mr. C. H. Fancy's letter dated March 6, 1990.
- 6. Mr. J. Franklin Mixson's letter with attachments received April 9, 1990.
- 7. Mr. C. H. Fancy's letter dated May 2, 1990.
- 8. Mr. J. Franklin Mixson's letter with attachments received May 21, 1990.
- 9. Mr. J. Franklin Mixson's letter with attachments received June 5, 1990.
- 10. Mr. J. Franklin Mixson's letter with attachments received June 7, 1990.
- 11. Mr. J. Franklin Mixson's letter with attachments received June 8, 1990.
- 12. Addendum to the June 8 letter from Mr. J. Franklin Mixson received June 11, 1990
- 13. EPA Memorandum No. 432
- 14. Technical Evaluation and Preliminary Determination dated June 12, 1990.
- 15. Mr. J. Franklin Mixson's letter with an attachment received June 28, 1990.
- 16. Mr. R. Bruce Mitchell's Interoffice Memorandum dated July 9, 1990.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

GENERAL CONDITIONS:

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 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - (x) Compliance with New Source Performance Standards
- 14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

GENERAL CONDITIONS:

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

- 1. Permitted annual hours of operation are 8,760.
- 2. The causticizing system is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version).
- 3. Stack sampling facilities for the lime kiln shall comply with all applicable provisions of F.A.C. Rule 17-2.700(4). Stack sampling facilities for the lime silo shall comply with all applicable provisions of F.A.C. Rule 17-2.700(4) if, and only if, a compliance test in accordance with F.A.C. Rule 17-2.700 Table I is required for mass emissions pursuant to F.A.C. Rule 17-2.700(3)(d).
- 4. Visible emissions from the lime kiln shall be less than 20 percent opacity pursuant to F.A.C. Rule 17-2.610(2). Compliance tests shall be measured by EPA Method 9 pursuant to F.A.C. Rule 17-2.700 Table I.
- 5. Particulate emissions from the lime silo shall not exceed 0.03 gr/dscf (0.15 lb/hr, 0.66 TPY) pursuant to F.A.C. Rule 17-2.650(2)(c)11.b.(ii). A compliance test shall be conducted using EPA Method 5, 40 CFR 60, Appendix A, in accordance with F.A.C. Rule 17-2.700 Table I. However, the mass emissions compliance test will be waived pursuant to F.A.C. Rule 17-2.700(3)(d) and an alternative standard of no visiblé emissions (5% opacity) shall be applied, which shall be verified by a compliance test using EPA Method 9, 40 CFR 60 Appendix A, in accordance with F.A.C. Rule 17-2.700.
- 6. The lime silo shall not exhibit any visible emissions (5% opacity) pursuant to F.A.C. Rule 17-2.650(2)(c)11.b.(i) and F.A.C. Rule 17-2.700(3)(d). A compliance test for visible emissions shall be conducted using EPA Method 9, 40 CFR 60, Appendix A, in accordance with F.A.C. Rule 17-2.700.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

SPECIFIC CONDITIONS:

7. All vehicular deliveries of purchased lime to the lime silo shall be verifiable on a per month basis. On an annual basis, the amount of purchased lime shall be submitted as part of the annual operating report (AOR) to Duval County's Bio-Environmental Services Division (BESD).

- Particulate matter emissions from the lime kiln shall not exceed 0.24 g/dscm (0.104 gr/dscf; 21.0 lbs/hr, 93.2 corrected to 10 percent oxygen, when liquid fossil fuel is burned 17-2.660(2)(a); Rule and, to F.A.C. 60.282(a)(3)(ii). Particulate matter emissions from the lime kiln shall not exceed 0.15 g/dscm (0.067 gr/dscf; 13.0 lbs/hr, 56.9 TPY) corrected to 10 percent oxygen, when gaseous fossil fuel is burned pursuant to F.A.C. Rule 17-2.660(2)(a); and, particulate 60.282(a)(3)(i). A compliance test for matter emissions shall be conducted using EPA Method 5, EPA Method 1, EPA Method 2 and EPA Method 3 pursuant to F.A.C. Rules 17-2.660(2)(b), 17-2.660(3)(b), 17-2.660(4)(a) and 17-2.700 Table I; and, 40 CFR 60.285(a)(1) through (4) and 40 CFR 60.285(b).
- 9. Total reduced sulfur emissions from the lime kiln shall not exceed 8 ppm by volume on a dry basis, corrected to 10 percent oxygen (1.0 lb/hr, 4.4 TPY: liquid fossil fuel). A compliance test for total reduced sulfur emissions shall be conducted using EPA Method 16 or 16A and EPA Method 3 pursuant to F.A.C. Rules 17-2.660(2)(b), 17-2.660(3)(b), 17-2.660(4)(a) and 17-2.700 Table I; and, 40 CFR 60.285(d).
- 10. The sulfur content of liquid fossil fuel burned in the lime kiln shall not exceed 2.50 percent, by weight, as determined by EPA Method 19, 40 CFR 60 Appendix A, and F.A.C. Rule 17-2.700.
- 11. Sulfur dioxide emissions from the lime kiln shall not exceed $10.4~\mathrm{lbs/hr}$ and $45.6~\mathrm{TPY}$. A compliance test for sulfur dioxide emissions shall be conducted using EPA Method 6 pursuant to F.A.C. Rule 17-2.700(6)(a)6. The compliance test will be a one-time requirement to verify the SO_2 emissions data submitted and related to the review for PSD (prevention of significant deteroriation) and EPA Memorandum 4.32.
- 12. A total reduced sulfur continuous emissions monitoring system shall be installed, certified, operated and maintained pursuant to the provisions of F.A.C. Rules 17-2.660(3)(e), 17-2.660(4)(b), 17-2.710(3)(b); and, 40 CFR 60.13, 40 CFR 60 Appendix A, and 40 CFR 60 Appendix B.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

SPECIFIC CONDITIONS:

- 13. A total reduced sulfur emissions report shall be provided to the BESD on a quarterly basis pursuant to the provisions of F.A.C. Rules 17-2.660(3)(a) and 17-2.710(4); and, 40 CFR 60.7 and 40 CFR 60.284(d).
- 14. Excess emissions of total reduced sulfur shall be determined quarterly pursuant to F.A.C. Rule 17-2.710(4)(c).
- 15. The causticizing system shall be subject to the provisions of F.A.C. Rule 17-2.250, Excess Emissions.
- 16. The causticizing system shall be subject to the provisions of F.A.C. Rule 17-4.130, Plant Operation-Problems.
- 17. The maximum fuel input to the lime kiln shall not exceed 535 gallons per hour and 4.69 million gallons per year when liquid fossil fuel is burned. Fuel consumption shall be verifiable on a monthly basis. On an annual basis, fuel consumption shall be reported in the AOR and submitted to BESD.
- 18. Maximum lime production rate of the lime kiln shall not exceed 11.5 tons per hour, 275 tons per day, and 100,375 tons per year. Lime production shall be verifiable on a daily and monthly basis. On an annual basis, lime production shall be reported in the AOR and submitted to BESD.
- 19. Maximum input to the lime storage silo shall not exceed 21.2 tons per hour of lime product. The deliveries of purchased lime shall verifiable on a monthly basis. The annual amount of purchased lime shall be reported in the AOR and submitted to BESD.
- 20. Compliance tests shall be conducted while the lime kiln is operating at 90-100% of the maximum permitted lime production rate and burning all of the TRS gases from the batch digester system and the MEE system.
- 21. A compliance test shall be conducted for the lime storage silo to demonstrate compliance with the permitted pollutant emissions standards. For the compliance test, two of the test runs shall be conducted while receiving 21.2 tons per hour (TPH) of purchased lime and one of the test runs shall be conducted while simultaneously receiving 11.2 TPH of lime from the lime kiln and 10 TPH of purchased lime.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

SPECIFIC CONDITIONS:

22. An operation and maintenance plan pursuant to the provisions of F.A.C. Rule 17-2.650(2)(g) shall be prepared for the lime kiln and the lime storage silo; and, submitted to the BESD prior to issuance of an operation permit.

- 23. Unconfined emissions of particulate matter during construction and operation of the lime kiln and lime silo shall comply with the provisions of F.A.C. Rule 17-2.610(3). Reasonable precautions that might be taken shall include, but are not limited to:
- a. Reduced speeds for vehicular traffic.
- b. Use of liquid resinous adhesives or other liquid dust suppressants or wetting agents.
- c. Use of paving or other asphaltic materials.
- d. Removal of particulate matter from paved roads and/or other paved areas by vacuum cleaning or otherwise by wetting prior to sweeping.
- e. Covering of trucks, trailers, front end loaders, and other vehicles or containers to prevent spillage of particulate matter during transport.
- f. Use of mulch, hydroseeding, grassing and/or other vegetative ground cover on barren areas to prevent or reduce windblown particulate matter.
- g. Use of hoods, fans, filters, and similar equipment to contain, capture, and vent particulate matter.
- h. Enclosure or covering of conveyor systems.
- 24. The introduction of TRS gases from any source other than the multiple effect evaporator system and batch digester system shall require an amendment to this permit prior to the actual introduction of the TRS gases.
- 25. Objectionable odors shall not be allowed off plant property in accordance with F.A.C. Rule 17-2.620(2).
- 26. All process equipment, except for the lime storage silo, that will be a part of the operational causticizing system, shall be vented to the lime kiln.
- 27. In accordance with F.A.C Rule 17-2.240, Circumvention, no person shall circumvent any air pollution control device, or allow the emissions of air pollutants without the applicable pollution control device operating properly.

PERMITTEE: Permit Number: AC 16-142989

Jefferson Smurfit Corp. Expiration Date: Dec. 31, 1991

SPECIFIC CONDITIONS:

28. In accordance with F.A.C Rule 17-2.610(3), Unconfined Emissions of Particulate Matter, pollutant abatement equipment must be operating properly during operational production.

- 29. In accordance with F.A.C. Rule 17-2.650(2)(e), Circumvention, no owner or operator of a source subject to the requirements of F.A.C. Rules 17-2.600 or 17-2.650(c), establishing maximum concentrations of particulate matter in the exhaust gas from the source, shall circumvent the provisions of an applicable emission limitation by increasing the volume of gas in any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. This includes allowing dilution air to enter the system through leaks, open vents, or similar means.
- 30. The lime handling system, i.e., conveyors, shutes, elevators, and storage bins, shall be enclosed and negative pressure maintained.
- 31. Failure of a control system(s) to meet the applicable and maximum allowable pollutant emission limiting standard and limit shall not be grounds for requesting a variance or relaxation of that standard and limit.
- 32. The lime kiln is subject to the provisions of 40 CFR 60.284(c)(1), (2), and (3).
- 33. The owner or operator of a source that has both a visible emissions and a particulate emissions limiting standard, shall run their compliance tests concurrently.
- 34. A fuel flow gauge shall be installed on each of the fuel lines, i.e., fuel oil, TRS NCG (noncondensible gas) handling system etc., to the lime kiln.
- 35. PM_{10} emissions shall not exceed 20.7 lbs/hr (90.6 TPY), and is assumed to be 98.3% of the PM emissions.
- 36. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

SPECIFIC CONDITIONS:

37. An application for an operation permit must be submitted to the Department's Northeast District and BESD offices at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this of July day 1990

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, Director Division of Air Resources Management



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary

June 12, 1990

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. J. Franklin Mixson V.P. and General Manager Jefferson Smurfit Corporation Jacksonville, Florida 32201

Dear Mr. Mixson:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to modify the causticizing system at your existing mill in Jacksonville, Duval County, Florida. The modification will allow an increase in the process throughput rates of the No. 3 lime kiln and associated lime storage silo.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Barry Andrews of the Bureau of Air Regulation.

Sincerely,

C. H. Fancy, P.E

Chief

Bureau of Air Regulation

CHF/BM/plm

Attachments

c: A. Kutyna, NE District

J. Manning, BESD

D. Buff, P.E., KBN

J. Cox, JSC

J. Harper, EPA

C. Shaver, NPS

BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of Application for Permit by:

Jefferson Smurfit Corporation DER File No. AC 16-142989 1915 Wigmore Street Jacksonville, Florida 32201

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons the attached Technical Evaluation and Preliminary stated in Determination.

applicant, Jefferson Smurfit Corporation, applied December 9, 1987, to the Department of Environmental Regulation to obtain a permit for the modification of the existing causticizing The modification will allow an increase in the maximum processing rate of the No. 3 lime kiln from 220 TPD to 275 TPD lime product and an increase in the maximum process input rate of the associated lime storage silo from 15.0 TPH to 21.2 TPH lime product. The proposed project will occur at the applicant's existing facility located in Jacksonville, Duval County, Florida.

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

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area For the purpose of this rule, "publication affected. newspaper of general circulation in the area affected" publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for administrative proceeding (hearing) in accordance with Section Statutes. The petition Florida must contain information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received

notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with

respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is Accordingly, to formulate agency action. Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the time frame constitutes a waiver of any right such allowed

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

C. H. Fancy P.E.

Chief

Bureau of Air Regulation

Copies furnished to:

- A. Kutyna, NE District
- J. Manning, BESD
- D. Buff, P.E., KBN
- J. Cox, JSC
- J. Harper, EPA
- C. Shaver, NPS

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 6-15-90

> 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.

State of Florida Department of Environmental Regulation Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Jefferson Smurfit Corporation, 1915 Wigmore Street, Jacksonville, Florida 32201, for the modification of the existing causticizing system located at the permittee's existing mill in Jacksonville, Duval County, Florida. The modification will allow an increase in the maximum processing rate of the No. 3 lime kiln from 220 TPD to 275 TPD lime product and an increase in the maximum process input rate of the associated lime storage silo from 15.0 TPH to 21.2 TPH lime product. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section The petition Florida Statutes. must contain information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action:
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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 position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

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

Department of Environmental Regulation Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Department of Environmental Regulation Northeast District 3426 Bills Road Jacksonville, Florida 32207

Duval County Department of Health, Welfare & Bio-Environmental Services 421 West Church Street, Suite 412 Jacksonville, Florida 32202

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation and Preliminary Determination

Jefferson Smurfit Corporation
Duval County
Jacksonville, Florida

Construction Permit Number: AC 16-142989

Department of Environmental Regulation Division of Air Resources Management Bureau of Air Regulation

I. Project Description

A. Applicant

Jefferson Smurfit Corporation 1915 Wigmore Street Jacksonville, Florida 32201

B. Project and Location

The applicant proposes to modify its existing mill by increasing the maximum production rate of the No. 3 lime kiln from 220 TPD to 275 TPD, which will require an increase in the input rate of an associated lime storage silo. The project also includes the installation of an electrostatic precipitator (ESP) control system as a replacement of the existing wet scrubber control system servicing the No. 3 lime kiln.

The project will occur at the applicant's existing facility located in Duval County, Florida. The UTM coordinates are Zone 17, 439.8 km East and 3359.4 km North.

C. Process and Controls

The lime mud cake is discharged from the mud filter and fed to the calcining unit, the No. 3 lime kiln. Carbon monoxide is driven off and calcium carbonate is converted to calcium oxide (quick-lime). The reburned lime is then fed to the lime slaker classifier or sent to the lime storage silo, which can also receive lime product from truck delivery.

An ESP control system will be installed to control particulate matter (PM) emissions and visible emissions (VE). A baghouse control system services the lime storage silo to control PM emissions and VE.

D. The Source Industrial Codes are:

2611 - Pulp Mill

E. The Source Classification Codes are:

•	Lime	Kiln		3-07-001-06	Tons ADUP
				3-90-004-03	10 ³ gals. burned
•	Lime	Storage	Silo	3-07-001-99	Tons ADUP
		_		3-05-102-05	Tons Processed
			,		(limestone)

II. Rule Applicability

The proposed modification is subject to preconstruction review in accordance with Chapter 403, Florida Statutes, Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version).

The application package was deemed complete on June 8, 1990.

The existing facility is located in Duval County, which is an area designated nonattainment for the pollutant ozone in accordance with F.A.C. Rule 17-2.410(1)(a). The existing facility is also located in that part of Duval County that has been designated nonattainment for the pollutant PM in accordance with F.A.C. Rule 17-2.410(2)(a)2. Volatile organic compounds (VOC) are considered to be precursors to ozone.

The existing mill is a major emitting facility in accordance with F.A.C. Rule 17-2.100(115) for the pollutants PM, VOC, sulfur dioxide (SO₂), nitrogen oxides (NO_X), and carbon monoxide (CO).

The following table exhibits the proposed modification's maximum potential pollutant emissions:

		Table	1				
Source	Maximum PM		tial Po		Emissi VOC	ons (I	TRS
Lime Kiln No. 3 ¹ Lime Storage Silo ²		90.6	45.6	98.6	20.7	13.8	4.4
Total:		91.3	45.6	98.6	20.7	13.8	4.4

Note: ¹Based on 8760 hours annual operation, 23,607 dscfm, and 0.104 gr/dscf.

²Based on 8760 hours annual operation, 570 dscfm, and 0.03 gr/dscf, with no change in product.

The following table exhibits the actual pollutant emissions from the existing No. 3 lime kiln:

Table 2							
Source	PM	Actual PM ₁₀	Pollutan SO ₂			TPY) CO	TRS
Lime Kiln No. 3 ¹ Lime Storage Silo ²	78.3 0.00	76.9 0.00	6.3	66.2	10.0	6.7	0.6

Note: ¹Based on 220 TPD lime product, 865 TPD ADUP, and 8,508 hours operated in 1989.

²Assumed 0.00 for the most conservative scenario.

The following table will exhibit the net pollutant emissions from the proposed modification (Table 1) and the actual emissions from the affected sources (Table 2):

		•	Table 3	3			
	PM	PM_{10}	so ₂	$\mathtt{NO}_{\mathbf{X}}$	voc	СО	TRS
Table 1	92.9	91.3	45.6	98.6	20.7	13.8	4.4
Table 2	-78.3	-76.9	-6.3	-66,2	-10.0	-6,7	-0.6
Net:	+14.6	+14.4	+39.3	+32.4	+10.7	+7.1	+3.8

Since there are no significant net emissions increase pursuant to Table 500-2, F.A.C. Chapter 17-2, for the proposed modification, the pollutants SO_2 , NO_X , CO and TRS are not subject to PSD (prevention of significant deterioration) new source review pursuant to F.A.C. Rule 17-2.500(5); also, the pollutants PM and VOC are not subject to nonattainment new source review pursuant to F.A.C. Rule 17-2.510(4). Therefore, the potential pollutant emissions are subject to review pursuant to F.A.C. Rule 17-2.520, Sources Not Subject to PSD or Nonattainment Requirements.

The proposed modification shall be subject to F.A.C. Rules 17-2.240, 17-2.250, 17-2.610(3), 17-2.620(2), 17-2.650(2)(c)9, 17-2.650(2)(c)11, 17-2.650(2)(e), 17-2.660, 17-2.700, and 17-2.710.

In accordance with F.A.C. Rule 17-2.240, Circumvention, no person shall circumvent any air pollution control device, or allow the emissions of air pollutants without the applicable pollution control device operating properly.

The proposed modification shall be subject to the provisions of F.A.C. Rule 17-2.250, Excess Emissions.

In accordance with F.A.C. Rule 17-2.610(3), Unconfined Emissions of PM, pollutant abatement equipment must be operating properly during operations/production.

In accordance with F.A.C. Rule 17-2.620(2), objectionable odors shall not be allowed off plant property.

Since there is a PM emission limiting standard for a lime kiln contained in 40 CFR 60.282 and there is not a visible emissions (VE) standard, the VE standard of 10% opacity, not to be exceeded, pursuant to F.A.C. Rule 17-2.650(2)(c)9.b. shall be applicable and is consistent with F.A.C. Rule 17-2.660(2)(b).

The lime storage silo operations shall be subject to F.A.C. Rule 17-2.650(2)(c)11., Materials Handling, Sizing, Screening, Crushing and Grinding Operations, which states that no owner or operator of a source subject to this provision shall cause,

permit, or allow any visible emissions (5% opacity) from such a source. The PM emissions limiting standard pursuant to this section shall be 0.03 gr/dscf, not to be exceeded.

The New Source Performance Standard (NSPS), 40 CFR 60, Subpart BB, Kraft Pulp Mills, was adopted by reference in accordance with F.A.C. Rule 17-2.660(2)(a). The proposed lime kiln is subject to the provisions of this NSPS.

In accordance with 40 CFR 60.282(a)(3), no owner or operator shall cause to be discharged into the atmosphere from any lime kiln any gases which contain PM in excess of 0.30 g/dscm (0.13 gr/dscf), corrected to 10% oxygen, when liquid fossil fuel is burned. However, the applicant has requested a more stringent emission limiting standard of 0.24 g/dscm (0.104 gr/dscf), corrected to 10% oxygen, when liquid fossil fuel is burned, in order to avoid new source review pursuant to F.A.C. Rules 17-2.500(5) and 17-2.510(4).

In accordance with 40 CFR 60.283(a)(5), no owner or operator shall cause to be discharged into the atmosphere from any lime kiln any gases which contain TRS in excess of 8 ppm by volume on a dry basis, corrected to 10% oxygen.

For the No. 3 lime kiln, the monitoring of emissions and operations shall be in accordance with 40 CFR 60.284 and F.A.C. Rule 17-2.710. The test methods and procedures shall be in accordance with 40 CFR 60.285 and F.A.C. Rule 17-2.700.

For the lime silo, the emissions test methods and procedures shall be in accordance with F.A.C. Rule 17-2.700.

III. Summary of Emissions and Air Quality Analysis

A. Emission Limitations

The regulated pollutant emissions from the proposed modification are visible emissions (VE), particulate matter (PM), sulfur dioxide (SO_2), and total reduced sulfur (TRS). The following table will reflect the maximum allowable emissions standards and limits applicable to the proposed modification:

	•	Table 4
Source	Pollutant	Maximum Allowable Emissions Standard/Limit
Lime Kiln	PM_{10} 1	Not to exceed 20.7 lbs/hr (90.6 TPY)
	PM	Not to exceed 0.24 g/dscm (0.104 gr/dscf) corrected to 10% oxygen, when liquid fossil fuel is burned (21.04 lbs/hr, 92.2 TPY)
	VE	Not to exceed 10% opacity

Table 4 cont'd					
Source	Pollutant	Maximum Allowable Emissions Standard/Limit			
	TRS	Not to exceed 8 ppm by volume on a dry basis, corrected to 10% oxygen; (while on liquid fossil fuel: 1.0 lb/hr, 4.38 TPY)			
	SO ₂	Sulfur content of the liquid fossil fuel is not to exceed 2.5%, by weight; not to exceed 10.4 lbs/hr and 45.6 TPY			
Lime Silo	PM	Not to exceed 0.03 gr/dscf (0.15 lb/hr, 0.66 TPY)			
· 	VE	Not to exhibit any VE (5% opacity)			

Note: ${}^{1}PM_{10}$ is assumed to be 98.3% of the PM emissions.

The emission limiting standards/limits are consistent with the applicable requirements pursuant to F.A.C. Chapter 17-2 and the NSPS, 40 CFR 60, Subpart BB, which is adopted by reference pursuant to F.A.C. Rule 17-2.660.

B. Air Quality Analysis

From a technical review of the application package and its amendments, the Department has determined that the proposed modification does not require an air quality analysis.

IV. Conclusion

Based on the information provided by Jefferson Smurfit Corporation, the Department has reasonable assurance that the proposed modification of the causticizing system, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.

Bany D. Aldun # 36024 6-15-90



Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Jefferson Smurfit Corp.
1915 Wigmore Street
Jacksonville, FL 32201

Permit Number: AC 16-142989

Expiration Date: December 31, 1991

County: Duval

Latitude/Longitude: 30°22'00"N

81°37'30"W

Project: Causticizing System

Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of the existing causticizing system, which will include the following: 1) replace the existing wet scrubber system serving the No. 3 lime kiln with an electrostatic precipitator; 2) increase the maximum operating rate in the No. 3 lime kiln from 220 TPD to 275 TPD lime product; 3) increase the maximum process in-put rate of the lime storage silo from 9.2 TPH to 11.5 TPH lime product from the No. 3 lime kiln; and, increase the maximum process in-put rate of the lime storage silo from 6.00 TPH to 21.2 TPH lime product, either from truck unloading or truck unloading and the No. 3 lime kiln. The existing lime kiln fires No. 6 fuel oil, with a maximum sulfur content of 2.5%, by weight, and has the capability to fire natural gas.

The proposed project will be constructed at the permittee's existing mill located at the above address in Duval County, Florida. The UTM coordinates are Zone 17-439.8 km East and 3359.4 km North.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments to be incorporated:

- Application to Modify Air Pollution Sources, DER Form 17-1.202(1), received December 9, 1987.
- 2. Mr. C. H. Fancy's letter dated January 7, 1988.
- 3. Mr. E. T. Tonn's letter with enclosures received April 24, 1989.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

Attachments Continued:

- 4. Mr. J. Franklin Mixson's letter with attachments received February 5, 1990.
- 5. Mr. C. H. Fancy's letter dated March 6, 1990.
- 6. Mr. J. Franklin Mixson's letter with attachments received April 9, 1990.
- 7. Mr. C. H. Fancy's letter dated May 2, 1990.
- 8. Mr. J. Franklin Mixson's letter with attachments received May 21, 1990.
- 9. Mr. J. Franklin Mixson's letter with attachments received June 5, 1990.
- 10. Mr. J. Franklin Mixson's letter with attachments received June 7, 1990.
- 11. Mr. J. Franklin Mixson's letter with attachments received June 8, 1990.
- 12. Addendum to the June 8 letter from Mr. J. Franklin Mixson received June 11, 1990
- 13. EPA Memorandum No. 432
- 14. Technical Evaluation and Preliminary Determination dated June 12, 1990.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

Permit Number: AC 16-142989 Expiration Date: Dec. 31, 1991

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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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 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - (x) Compliance with New Source Performance Standards
- 14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings continuous monitoring instrumentation) required by permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

- 1. Permitted annual hours of operation are 8,760.
- 2. The causticizing system is subject to all applicable provisions of F.A.C. Chapters 17-2 and 17-4, and 40 CFR (July 1, 1988 version).
- 3. Stack sampling facilities for the lime kiln shall comply with all applicable provisions of F.A.C. Rule 17-2.700(4). Stack sampling facilities for the lime silo shall comply with all applicable provisions of F.A.C. Rule 17-2.700(4) if, and only if, a compliance test in accordance with F.A.C. Rule 17-2.700 Table I is required for mass emissions pursuant to F.A.C. Rule 17-2.700(3)(d).
- 4. Visible emissions from the lime kiln shall not exceed 10 percent opacity pursuant to F.A.C. Rule 17-2.650(2)(c)9.b. Compliance tests shall be measured by EPA Method 9 pursuant to F.A.C. Rule 17-2.700 Table I.
- 5. Particulate emissions from the lime silo shall not exceed 0.03 gr/dscf (0.15 lb/hr, 0.66 TPY) pursuant to F.A.C. Rule 17-2.650(2)(c)ll.b.(ii). A compliance test shall be conducted using EPA Method 5, 40 CFR 60, Appendix A, in accordance with F.A.C. Rule 17-2.700 Table I. However, the mass emissions compliance test will be waived pursuant to F.A.C. Rule 17-2.700(3)(d) and an alternative standard of no visible emissions (5% opacity) shall be applied, which shall be verified by a compliance test using EPA Method 9, 40 CFR 60 Appendix A, in accordance with F.A.C. Rule 17-2.700.
- 6. The lime silo shall not exhibit any visible emissions (5% opacity) pursuant to F.A.C. Rule 17-2.650(2)(c)ll.b.(i) and F.A.C. Rule 17-2.700(3)(d). A compliance test for visible emissions shall be conducted using EPA Method 9, 40 CFR 60, Appendix A, in accordance with F.A.C. Rule 17-2.700.
- 7. All vehicular deliveries of purchased lime to the lime silo shall be verifiable on a per month basis. On an annual basis, the amount of purchased lime shall be submitted as part of the annual operating report (AOR) to Duval County's Bio-Environmental Services Division (BESD).

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- 8. Particulate matter emissions from the lime kiln shall not exceed 0.24 g/dscm (0.104 gr/dscf; 21.0 lbs/hr, 93.2 TPY) corrected to 10 percent oxygen, when liquid fossil fuel is burned pursuant to F.A.C. Rule 17-2.660(2)(a); and, 40 CFR 60.282(a)(3)(ii). A compliance test for particulate matter emissions shall be conducted using EPA Method 5, EPA Method 1, EPA Method 2 and EPA Method 3 pursuant to F.A.C. Rules 17-2.660(2)(b), 17-2.660(3)(b), 17-2.660(4)(a) and 17-2.700 Table I; and 40 CFR 60.285(a)(1) through (4) and 40 CFR 60.285(b).
- 9. Total reduced sulfur emissions from the lime kiln shall not exceed 8 ppm by volume on a dry basis, corrected to 10 percent oxygen (1.0 lb/hr, 4.4 TPY: liquid fossil fuel). A compliance test for total reduced sulfur emissions shall be conducted using EPA Method 16 or 16A and EPA Method 3 pursuant to F.A.C. Rules 17-2.660(2)(b), 17-2.660(3)(b), 17-2.660(4)(a) and 17-2.700 Table I; and, 40 CFR 60.285(d).
- 10. The sulfur content of liquid fossil fuel burned in the lime kiln shall not exceed 2.50 percent, by weight, as determined by EPA Method 19, 40 CFR 60 Appendix A, and F.A.C. Rule 17-2.700.
- ll. Sulfur dioxide emissions from the lime kiln shall not exceed $10.4~\mathrm{lbs/hr}$ and $45.6~\mathrm{TPY}$. A compliance test for sulfur dioxide emissions shall be conducted using EPA Method 6 pursuant to F.A.C. Rule 17-2.700(6)(a)6. The compliance test will be a one-time requirement to verify the SO_2 emissions data submitted and related to the review for PSD (prevention of significant deteroriation) and EPA Memorandum 4.32.
- 12. A total reduced sulfur continuous emissions monitoring system shall be installed, certified, operated and maintained pursuant to the provisions of F.A.C. Rules 17-2.660(3)(e), 17-2.660(4)(b), 17-2.710(3)(b); and, 40 CFR 60.13, 40 CFR 60 Appendix A, and 40 CFR 60 Appendix B.
- 13. A total reduced sulfur emissions report shall be provided to the BESD on a quarterly basis pursuant to the provisions of F.A.C. Rules 17-2.660(3)(a) and 17-2.710(4); and, 40 CFR 60.7 and 40 CFR 60.284(d).
- 14. Excess emissions of total reduced sulfur shall be determined quarterly pursuant to F.A.C. Rule 17-2.710(4)(c).
- 15. The causticizing system shall be subject to the provisions of F.A.C. Rule 17-2.250, Excess Emissions.
- 16. The causticizing system shall be subject to the provisions of F.A.C. Rule 17-4.130, Plant Operation-Problems.
- 17. The maximum fuel input to the lime kiln shall not exceed 535 gallons per hour and 4.69 million gallons per year when liquid fossil fuel is burned. Fuel consumption shall be verifiable on a per month basis. On an annual basis, fuel consumption shall be reported in the AOR and submitted to BESD.

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18. Maximum lime production rate of the lime kiln shall not exceed 11.5 tons per hour, 275 tons per day, and 100,375 tons per year. Lime production shall be verifiable on a daily and per month basis. On an annual basis, lime production shall be reported in the AOR and submitted to BESD.

- 19. Maximum input to the lime storage silo shall not exceed 21.2 tons per hour of lime product. The deliveries of purchased lime shall verifiable on a per month basis. The annual amount of purchased lime shall be reported in the AOR and submitted to BESD.
- 20. Compliance tests shall be conducted while the lime kiln is operating at 90-100% of the maximum permitted lime production rate and burning all of the TRS gases from the batch digester system and the MEE system.
- 21. A compliance test shall be conducted for the lime storage silo to demonstrate compliance with the permitted pollutant emissions standards. For the compliance test, two of the test runs shall be conducted while receiving 21.2 tons per hour (TPH) of purchased lime and one of the test runs shall be conducted while simultaneously receiving 11.2 TPH of lime from the lime kiln and 10 TPH of purchased lime.
- 22. An operation and maintenance plan pursuant to the provisions of F.A.C. Rule 17-2.650(2)(g) shall be prepared for the lime kiln and the lime storage silo; and, submitted to the BESD prior to issuance of an operation permit.
- 23. Unconfined emissions of particulate matter during construction and operation of the lime kiln and lime silo shall comply with the provisions of F.A.C. Rule 17-2.610(3). Reasonable precautions that might be taken shall include, but are not limited to:
- a. Reduced speeds for vehicular traffic.
- b. Use of liquid resinous adhesives or other liquid dust suppressants or wetting agents.
- c. Use of paving or other asphaltic materials.
- d. Removal of particulate matter from paved roads and/or other paved areas by vacuum cleaning or otherwise by wetting prior to sweeping.
- e. Covering of trucks, trailers, front end loaders, and other vehicles or containers to prevent spillage of particulate matter during transport.
- f. Use of mulch, hydroseeding, grassing and/or other vegetative ground cover on barren areas to prevent or reduce windblown particulate matter.
- g. Use of hoods, fans, filters, and similar equipment to contain, capture, and vent particulate matter.
- h. Enclosure or covering of conveyor systems.

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- 24. The introduction of TRS gases from any source other than the multiple effect evaporator system and batch digester system shall require an amendment to this permit prior to the actual introduction of the TRS gases.
- 25. Objectionable odors shall not be allowed off plant property in accordance with F.A.C. Rule 17-2.620(2).
- 26. All process equipment, except for the lime storage silo, that will be a part of the operational causticizing system, shall be vented to the lime kiln.
- 27. In accordance with F.A.C Rule 17-2.240, Circumvention, no person shall circumvent any air pollution control device, or allow the emissions of air pollutants without the applicable pollution control device operating properly.
- 28. In accordance with F.A.C Rule 17-2.610(3), Unconfined Emissions of Particulate Matter, pollutant abatement equipment must be operating properly during operational production.
- 29. In accordance with F.A.C. Rule 17-2.650(2)(e), Circumvention, no owner or operator of a source subject to the requirements of F.A.C. Rules 17-2.600 or 17-2.650(c), establishing maximum concentrations of particulate matter in the exhaust gas from the source, shall circumvent the provisions of an applicable emission limitation by increasing the volume of gas in any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. This includes allowing dilution air to enter the system through leaks, open vents, or similar means.
- 30. The lime handling system, i.e., conveyors, shutes, elevators, and storage bins, shall be enclosed and negative pressure maintained.
- 31. Failure of a control system(s) to meet the applicable and maximum allowable pollutant emission limiting standard and limit shall not be grounds for requesting a variance or relaxation of that standard and limit.
- 32. The lime kiln is subject to the provisions of 40 CFF 60.284(c)(1), (2), and (3).
- 33. The owner or operator of a source that has both a visible emissions and a particulate emissions limiting standard, shall run their compliance tests concurrently.
- 34. A fuel flow gauge shall be installed on each of the fuel lines, i.e., fuel oil, TRS NCG (noncondensible gas) handling system etc., to the lime kiln.

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35. PM_{10} emissions shall not exceed 20.7 lbs/hr (90.6 TPY), and is assumed to be 98.3% of the PM emissions.

- 36. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 37. An application for an operation permit must be submitted to the Department's Northeast District and BESD offices at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued	this	 day
of		 1990

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, Director Division of Air Resources Management ATTACHMENTS AVAILABLE UPON REQUEST