Check Sheet

Company Name: Je FRAZSON SMURFIT	-
Permit Number: AC 16-14/869	
PSD Number:	
Permit Engineer:	
Application:	ss References:
Intent: Intent to Issue Notice of Intent to Issue Technical Evaluation BACT 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 Determination Other	
Post Permit Correspondence: Extensions/Amendments/Modifications Other	•

PM +1-26-89 Jax, Fl



JEFFERSON SMURFIT CORPORATION CEIVED

ALTON, ILLINOIS 62002-2276

618/463-600 AY 1 1989

April 24, 1989

CERTIFIED - RETURN RECEIPT REQUESTED

Reply to: Container board Mill Division

1915 WIGMORE STREET P.O. BOX 150

JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

Mr. Steve Smallwood, P.E.
Director
Air Resources Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400

SUBJECT: BATCH DIGESTER SYSTEM

PERMIT NO. AC16-141869

Dear Mr. Smallwood:

The purpose of this letter is to confirm our understanding of a conversation between you and Gene Tonn on Thursday, April 6, 1989 concerning the new batch digester system nearing completion in the Jacksonville Mill of Jefferson Smurfit Corporation.

Jefferson Smurfit Corporation expects and fully intends to comply by May 12, 1989 with the regulation of TRS emissions from the existing batch digester system by replacement with a new batch digester system. Gene Tonn has explained to you the status of the construction and start-up of the new digester system, and our concern for what options are available should an unavoidable, unforeseen, or catastrophic occurrence makes it impossible for the new digester system to be fully operational by May 12, necessitating continued operation of the existing digester system.

In considering the options provided by State Regulations, it appears appropriate as you have suggested, that JSC could seek relief under FAC 17-2.50 Excess Emissions which would allow excess TRS emissions from the existing digester system in the event of a malfunction of the new digester system. The duration of the excess emissions is not to exceed two hours in any 24 hour period unless specifically authorized by the Department for a longer duration. You explained that the Deputy Secretary - Northeast District has the authority to grant an excess emission up to 10 days. An excess emissions of a duration greater than 10 days would require approval of the Secretary of the Department.

It was also your suggestion that representatives of JSC meet with representatives of the DER Northeast District and of the Jacksonville BESD to discuss JSC's concern and to agree on a procedure to follow in the event that the new digester system is not timely operational.

Mr. Steve Smallwood April 24, 1989 page 2

A discussion has taken place and an agreement has been reached with Mr. Ernie Frey and Mr. Bill Stewart of the Northeast District DER.

Discussion with a representative of the Jacksonville BESD is taking place.

May I again assure you that JSC fully intends and expects to fully comply with the TRS regulations of FAC 17-2 by May 12, 1989. Because of our concern of the consequences of an unavoidable, unforeseen or catastrophic occurrence, we consider it prudent to identify an option and agree on a procedure to initiate relief with the Department and the Jacksonville BESD in the unlikely event that the new digester system is not timely operational.

JSC appreciates your assistance in the matter. Should you not agree with the understanding described in this letter, please advise.

Very truly yours,

J. Franklin Myson

J. Franklin Mixson Vice President & General Manager

JFM:td BDS-FDER

cc: Ernie Frey, DER

Bill Stewart, P.E., DER

Richard McQuire

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

JACKSONVILLE, FL 32201

TELEPHONE: 904/353-3611

P.O. BOX 150







JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276

ALTON. ILLINOIS 62002-2276

618/463-6000

May 12, 1989

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. C. H. Fancy, P. E. Deputy Chief Air Resources Management Florida Department of Environmental Regulation 2600 Blair Stone Rd. Tallahassee, Florida 32301-2400

RE: NOTIFICATION OF INITIAL STARTUP

AC16-141869

Dear Mr. Fancy:

In regard to construction permit AC16-141869 authorizing Jefferson Smurfit Corporation to construct a digester system, this is to inform you, as required by 40CFR 60.7(3), of initial startup of the digester system of April 29, 1989.

Very truly yours,

J. Franklin Mixson

Vice President & General Manager

JFM:td STARTUP

Khurshid Mehta, P.E., BESD cc: Bill Stewart, P. E. DER

JEFFERSON SMURFIT CORPORATION



401 ALTON STREET, P.O. BOX 276

ALTON, ILLINOIS 62002-2276

May 12, 1989

HAND DELIVERED

Mr. James Manning, P. E.
Deputy Director
Department of Health, Welfare and
Bio-Environmental Services
421 W. Church St. Suite 412
Jacksonville, Florida 32202-4111

Re: JEFFERSON SMURFIT CORPORATION BATCH DIGESTER SYSTEM

Dear Mr. Manning:

In compliance with all existing regulatory requirements, including Specific Condition 14 of Construction Permit No. AC16-141869, The Compliance Plan, and Supplemental Compliance Plan, the existing batch digester system is being retired from service as of May 12, 1989. Accordingly, the Jefferson Smurfit Corporation is hereby surrendering possession of the related permits for the existing digester system to the BESD, subject to any rights that it may exercise until the expiration date of those permits, including, but not limited to Specific Condition 14 of the Construction Permit and F.A.C. Rule 17-2.960(1)(e).

Very truly yours,

J. Franklin Mixson

Vice President & General Manager

Reply to: Contaînerboard Mill Division

JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

MAY 1 5 1989.0. BOX 150

cc: Clair Fancy, P.E., DER
Bill Stewart, P.E., DER

JFM:td BDS-ETJM fach souville, FL



JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276

ALTON, ILLINOIS 62002-2276

618/463-6000

Reply to: Containerboard Mill Division

1915 WIGMORE STREET P.O. BOX 150 JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

January 24, 1989

RECEIVED

JAN 31 1989

DER . L

CERTIFIED MAIL

Mr. Clair H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
State of Florida
Department of Environmental Regulations
2600 Blair Stone Road
Tallahassee, Florida 32301-2400

SUBJECT:

Jefferson Smurfit Corporation - TRS
Compliance Plan for the Digester System

Dear Mr. Fancy:

On July 7, 1987, the Jefferson Smurfit Corporation submitted to the Florida Department of Environmental Regulation a Compliance Plan in which the Company proposed to replace its existing digesters with new equipment on or before May 12, 1989. The Compliance Plan also consisted of the milestone date of February 12, 1989 as the date upon which construction of the new digester system would be completed. The purpose of this letter is to inform the DER that although the Company currently expects to meet the May 12, 1989 deadline in accordance with the Compliance Plan requirements, completion of construction will be somewhat delayed from February 1989 to on or about March 31, 1989. This notification applies only to the Digester System, and in no way

affects the remaining TRS projects set forth in any other Compliance

Plan, which are either on or ahead of schedule.

The reason for this delay in completion of construction of the Digester System is that the contractors and their subcontractors experienced delays in their schedules, rendering them unable to timely deliver to the Jefferson Smurfit Corporation all of the equipment necessary to complete construction by the February 1989 milestone date. The Jefferson Smurfit Corporation has been applying pressure to its contractors in an effort to make sure that the original schedule is followed. As of today, the five digesters and all major equipment have

RECEIVED BUR, OF PERM.

JAN 20 mm

Mr. Clair H. Fancy, P.E. January 24, 1989
Page -2-

been delivered to the Jacksonville mill, and construction is progressing.

We will continue to keep you informed of the progress of this project. If you have any questions, please advise.

Very truly yours,

JFM/mlc

J. Franklin Mixson Vice President - Gen. Mgr.

c.c. James L. Manning
 Bio-Environmental Services Division

Mike Hooley Boww Mitchell

BUR, OF PERM.

file copy



JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276

ALTON, ILLINOIS 62002-2276

618/463-6000

July 26, 1988

RECEIV

Reply to: Containerboard Mill Division

1915 WIGMORE STREET P.O. BOX 150

JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

AUG 1 1988

Mr. Steve Smallwood, P.E. Chief

DER - BAQM

Bureau of Air Quality Management 2600 Blair Stone Road Tallahassee, Florida 32701

Dear Mr. Smallwood:

The construction of a new batch digesting system Permit No. AC-16-141869 was started on July 11, 1988.

Notification of the start of construction for this project is required by Jefferson Smurfit Corporation's TRS compliance plan and by Federal and State regulations for new sources.

This letter is to satisfy all requirements for notification of initial construction for this batch digester system.

If you have any questions concerning this notification, please contact Gene Tonn at 353-3611.

Very truly yours,

J. Franklin Mixson

Vice President & General Manager

JFM/bem

I certify by this letter delivered by Certified Mail to Steve Smallwood, Chief, Bureau of Air Quality Management, 2600 Blair Stone Road, Tallahassee, FL and James Manning, Deputy Director, Bio-Environmental Services Division, 421 West Church Street, Jacksonville, FL that construction was started on batch digester system AC-16-141869 on July 11, 1988.

Copied: Rill Stewart

Lugene II. Tonn, P.E.

TERED E

Please sud copy de Please sud copy de Presse sud copy Brun. Let Bruce ser







Mr. Steve Smallwood, P.E.

Chief

Bureau of Air Quality Management

2600 Blair Stone Road Tallahassee, Florida 300 ECEIVED

MAIL

DER - BAQM

AUG 1 1988

Heleneller Alberther line

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SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Fallure 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 evailable. Consult postmaster for fees and check box(es) for additional service(s) requested. 1. X Show to whom delivered, date, and addressee's address. 2. Restricted Delivery f(Extra charge) 1				
3. Article Addressed to: Mr. J. Franklin Mixon V.P. and General Manager Jefferson Smurfit Corp. 1915 Wigmore Street Jacksonville, FL 32201	4. Article Number P 778 940 856 Type of Service: Registered Insured Certified COD Express Mail			
	Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .			
5. Signature – Addressee X 6. Signature – Agent X C L Sharman 7. Date of Delivery 6-25-85	8. Addressee's Address (ONLY if requested and fee paid)			
PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268	DOMESTIC RETURN RECEIPT			

P 778 940 856 RECEIPT FOR CERTIFIED MAIL NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL (See Reverse)

	Sent to Mr. J. Franklin	Mixon		
	Street and No. 1915 Wigmore St.			
P.O. State and ZIP Code Jacksonvill, FL 3220				
İ	Postage	\$		
	Certified Fee			
	Restricted Delivery Fee			
	Return Receipt showing to whom and Date Delivered			
1985	Return Receipt showing to whom, Date, and Address of Delivery			
June	TOTAL Postage and Fees	S		
8	Postmark or Date	<u> </u>		
S Form 3800, June 1985	Mailed: 6-22-8 Permit: AC 16-	8 141869		



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 16, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Mixson:

Re: Amendments to Construction Permit No. AC 16-141869 Batch Digester System

The Department received your letter on June 14, 1988, requesting amendments to the above referenced construction permit. Additional clarification was received by phone for Specific Condition No. 2 from Mr. Gene Tonn and Mr. Norman Davis with Jefferson Smurfit Corporation by Mr. Bruce Mitchell (BAQM) on June 16, 1988. The Bureau agrees with the requests and the following will be changed and added:

Specific Conditions

No. 2:

From: The maximum production rate shall not exceed 89.08 TPH ADP (based on a nominal utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white/black liquor). For operation and PSD review purposes, the maximum daily production rate shall not exceed 1250 TPD ADP.

To: For testing purposes and NSPS applicability purposes, the maximum production rate of the digester system will be 89.08 TPH ADP (tons per hour air dried pulp). Tests for compliance will be performed with the control device (No. 3 Lime Kiln) operating at 90-100% of the maximum rate and with the digester system operating as near the maximum production rate as possible, but no less than 85% of the maximum rate. For PSD purposes, the maximum production rate of the digester system will be 1250 TPD ADP (tons per day air dried pulp: based on a nominal utilization rate of 4,808 TPD wood chips (wet @ 50% moisture) and 492 TPD white liquor (dry) and 211 TPD black liquor (dry)).

Mr. J. Franklin Mixson Page Two June 16, 1988

No. 9:

From: The permittee shall provide proof of compliance with FAC Rule 17-2.960(1)(d)1.b., by May 12, 1989, to the Duval County's Department of Health, Welfare and Bio-Environmental Services Division (BESD).

To: Pursuant to FAC Rule 17-2.960(1)(d)1.b., the batch digester system shall be in final compliance by May 12, 1989, and the permittee shall provide proof of final compliance by June 26, 1989, to the City of Jacksonville, Department of Health, Welfare and Bio-Environmental Services, Bio-Environmental Services Division (BESD) or request in writing that the Secretary or Secretary's designee grant an extension of time pursuant to FAC Rule 17-2.960(1)(e).

Attachment to be Incorporated:

10. Mr. J. Franklin Mixson's letter dated June 13, 1988, and received June 14, 1988.

This letter must be attached to the construction permit, No. AC 16-141869, and shall become a part of the permit.

Sincerely,

Dale Twachtmann

Secretary

DT/ks

cc: K. Mehta, BESD

B. Williams, JSC

J. Cox, JSC

D. Buff, P.E., KBN

B. Pittman, Esq.,.DER

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee			
To:	Loctn.:		
To:	Loctn.:		
То:	Loctn.:		
From:	Date:		
Reply Optional []	Reply Required []	Info. Only []	
Date Due:	Date Due:		

TO: Dale Twachtmann

FROM: Howard L. Rhodes

SUBJ: Approval of Amendments for the Construction Permit

AC 16-141869: Batch Digester System

Jefferson Smurfit Corporation

DATE: June 16, 1988

Attached for your approval and signature is an amendment package prepared by Central Air Permitting for the above referenced air construction permit. There are no controversies associated with this action.

I recommend your approval and signature.

HLR/agm/bm

attachment



Office of the Secretary

RECEIVED

JUN 22 1988

DER - BAQM

File Copy



JEFFERSON SMURFIT CORPORAT

401 ALTON STREET, P.O. BOX 276

ALTON, ILLINOIS 62002-2276

618/463-6000

June 13, 1988

FEDERAL EXPRESS

Mr. C. H. Fancy, P.E. Deputy Chief Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32301-8241

SUBJECT: Construction Permit No. AC16-141869

Batch Digester System

Jefferson Smurfit Corporation

Jacksonville Mill

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

P.O. BOX 150

JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

RECEIVED

JUN 14 1988

DER - BAOM

Dear Mr. Fancy:

The purpose of this letter is to request that two changes be made to the subject permit as agreed upon in a meeting with Mr. Thomas and Mr. Mitchell for DER, and Mr. Cox, Mr. Millican and Mr. Tonn for Jefferson Smurfit Corporation on April 13, 1988.

In discussing Specific Condition 2, the department agreed to revise the conditions to conditions being negotiated for other similar sources in the pulp and paper industry. The following language is suggested and requested as a replacement for the language of Specific Condition 2 in the construction permit issued March 18, 1988.

"For testing purposes and NSPS applicability purposes the maximum production rate of the digester system will be 89.08 TPH ADP (tons per hour, air dried pulp). Tests for compliance will be performed with the control device (No. 3 Lime Kiln) operating at 90-100% of the maximum rate and with the digester system operating as near the maximum production rate as possible, but no less than 85% of the maximum rate. For PSD purposes the maximum production rate of the digester system will be 1250 TPD ADP (tons per day air dried pulp: based on a nominal utilization rate of 4,808 TPD wood chips (wet @ 50% moisture) and 3,517 TPD cooking liquor)."

In Specific Condition 9, line 4, it is requested that the period after (BESD) be deleted and the following phrase follow (BESD): "or request in writing that the Secretary or Secretary's designee grant an extension of time pursuant to 17-2.960(1)(e) FAC."

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

If there should be any questions, please call Gene Tonn at 904/353-3611, Extension 287 or write to me at the above address.

JFM/bem

CHFIBT

Annundement note boase: Khurshid Mehta, P.E., BESD

Bauce Mitchell 6-14.78

Franklin Mixson Vice President & General Manager

Very truly yours,

To Duce Mitchell Date Oll Time 11:27	
while you were out of Phone	
TELEPHONED PLEASE CALL CALLED TO SEE YOU WILL CALL AGAIN WANTS TO SEE YOU URGENT RETURNED YOUR CALL	
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Орегатог	

Hand Delivered

LAW OFFICES

OERTEL & HOFFMAN

A PROFESSIONAL ASSOCIATION

KENNETH G. OERTEL
KENNETH F. HOFFMAN
SEGUNDO J. FERNANDEZ
TERRY COLE
HAROLD F. X. PURNELL
M. CHRISTOPHER BRYANT
W. DAVID WATKINS
MARTHA J. EDENFIELD
R. L. CALEEN, JR.
WILLIAM E. POWERS, JR.

SUITE C 2700 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301 TELEPHONE (904) 877-0099

MAILING ADDRESS:
POST OFFICE BOX 6507
TALLAHASSEE, FLORIDA 32314-6507

April 13, 1988

Mr. Steve Smallwood, Chief Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Dear Steve:

As we discussed, attached is a copy of the portion of the Smurfit digester permit, as issued, and a copy of a letter containing language which would, I believe, be acceptable to most of the paper companies. If this language could be inserted in place of the highlighted section in this and the other permits for all companies, one major remaining question could be resolved.

If you or Clair could give me a call once you have read this, it would be appreciated.

Sincerely,

/ eug Terry (Cole

TC:slt 1116.004

cc: Clair Fancy, w/attachments

Bruce Mitchell 4-20.88 RAM

LAW OFFICES

OERTEL & HOFFMAN

A PROFESSIONAL ASSOCIATION
POST OFFICE BOX 6507
TALLAHASSEE, FLORIDA 32314-6507

BY HAND DELIVERY

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Return to MV3.) Senton

4.30.84

Mr. Steve Smallwood, Chief Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Fl 32399-2400

RECEIVED

APR 13 1988

DER - BAQM

Permit Number: AC 16-141869 Expiration Date: August 10, 1989

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. The project may operate continuously (i.e., 8760 hrs/yr).
- 2. The peak production rate shall not exceed 89.08 TPH ADP (tons per hour of air dried pulp; based on a utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white liquor), 234,608 lbs/hr black liquor solids (dry), and 706 lbs/hr turpentine. The maximum daily production rate shall not exceed 1250 TPD ADP (tons per day of air dried pulp).





OERTEL & HOFFMAN, P.A.

JEFFERSON SMURFIT CORPORATION & CONTAINER CORPORATION OF AMERICA

Mill Division

NORTH 8TH STREET
PO. BOX 2000
FERNANDINA BEACH, FL 32034
TELEPHONE: 904/261-5551

March 10, 1988

Mr. Bill Thomas
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallhassee, FL 32399-2400

Dear Mr. Thomas:

The following comments are in response to the Technical Evaluation and Preliminary Determination and draft permits which we received on March 1, 1988. These draft permits are for the construction of equipment to bring various sources in this mill into compliance with the TRS regulations.

Comments on Permit Nos. AC 45-141871, AC 45-141872, AC 45-141873

Our first comment is directed at the draft permits for the Batch Digesters, the Kamyr Digester, and the No. 5 MEE. These are the three sources from which the NCG will be collected and incinerated in the new No. 4 lime kiln. All three of these draft permits include a specific condition (Specific Condition No. 2 in each case) which limits the production rate or process thru-put rate for each system. In our recent meeting Mr. Steve Smallwood and Mr. Bruce Mitchell spent some time discussing the Department's rationale for these production limitations. While we understand Mr. Smallwood's concerns over adequately describing and controlling the sources so as to ensure compliance with the rule, we do not feel that specific production limitations are necessary or justified.

As the Technical Evaluation and the draft permits state, the incineration device for these three sources will be the No. 4 lime kiln. As such, the NSPS limit of 8 ppm TRS emissions applies to that kiln whether NCG is being incinerated or not. Thus the effective emission limit and potential emissions from those sources is zero.

We recognize the need on the Department's part to use a peak production number in determination of potential and uncontrolled emissions. However, as stated above, since the incineration device in this case is itself a controlled production device, the effective potential emissions from these sources is zero. Therefore, we would like to propose the following alternative language for Specific Condition 2 in each of the three referenced permits:

"2.	For purposes of	PSD and	other	emissions	calculations,	the
	peak production	rate of	the _		is".	

Page 2 March 10, 1988

We would also like to point out that Specific condition 14 of each permit states that any change in operation which constitutes a Modification as defined by FAC 17-2.100 (118) must be submitted to DER for approval. Under this definition, any increase in production rate or change in control device which would result in increased emissions must have prior approval from the Department.

We feel that the combination of the proposed language and the limitations of Specific Contion 14 are more than adequate to protect the interests of the Department, the general public and Container Corporation of America.

Comment on Permit No. 45-A141875

This proposed permit is for the No. 4 Smelt Dissolving Tank. This source has been previously permitted, and as such requires only a modification to the existing permit No. AO 45-107514. We feel that the construction permit and subsequent operating permit modification should address only TRS emissions and the construction of the control device only as it pertains to TRS. The existing limitations on particulate emissions, etc. should not be changed or affected by the installation of the new control device providing the new device meets or exceeds those limits.

Therefore, we request the following changes in the referenced proposed permit:

Specific Conditions Nos. 3., 4., 6.a), and 6.b) should be deleted from the proposed construction permit.

Specific Condition No. 12. should be changed to reflect the fact that the existing Operating Permit will be modified and a new Operating Permit is not required.

Comments on AC 45-141877

The Technical Evaluation states that the new No. 4 lime kiln will be the only source permitted to burn fuel oil with a sulfur content limit of 3.0%. The proposed permit then states in Specific Condition 22 that a separate fuel oil storage tank be provided exclusively for the No. 4 kiln. The existing permits for our Nos. 4 and 5 Power Boilers, AO 45-114419 and AO 45-114418 respectively, show that both of sources are permitted to burn No. 6 fuel oil at 3.0% or less sulfur content also. Only our No. 7 Power Boiler is permitted to burn No. 6 fuel oil at less than 2.5% sulfur content. This boiler does not have a dedicated fuel oil storage tank at this time, thus we are presently using only No. 6 fuel oil with less than 2.5% sulfur content. Our regular certifications of ASTM fuel oil analysis which we submit to the Department show that our No. 6 fuel oil has always met this requirement. Future plans allow for the possibility of segregating fuel for No. 7 Power Boiler from that used in the other sources. As a result, we feel that it is unnecessary to require that a separate fuel oil storage tank be provided for this source, and we request that Specific Condition No. 22 be deleted from this permit.

As I explained in my telephone conversation with Mr. Bruce Mitchell, there appear to be two errors in the Technical Evaluation and draft permit pertaining to this source. First, we had requested a particulate emission rate of 43.5 lb/hr from the lime kiln. This was the number used in the calculations of contemporaneous emissions increases for PSD increment assessment in the application. However, the number appears as 45.3 lb/hr in the technical brief and this number is carried through the draft permit as well. As mentioned, the correct emission rate should be 43.5 lb/hr PM. The second error appears in Specific Condition 13 of the draft permit. The date for final compliance is stated as May 12, 1989. However, since this permit is for replacement of the existing kilns, the compliance date should be November 12, 1990. This date is also independent on granting of the Variance, since no variance was requested for the lime kiln.

Finally, in Specific Condition 19, lines 6 and 7 use the words "complete destruction of the pollutant" in referring to incineration of the TRS in the lime kiln. In fact, since the lime kiln itself will have a TRS limit of 8 ppm, we do not feel we are required to show "complete destruction" of the TRS from the collected sources, only that the lime kiln itself, with the TRS being incinerated in it, meets the 8 ppm limit. A true determination of "complete destruction" of the TRS gasses being incinerated would be very costly due to the very low level of TRS emission from the kiln and is neither necessary nor justified. We would like to request that this wording be changed to reflect that the TRS test need only show that the lime kiln meets its TRS limit with the NCG being incinerated in it.

Container Corporation of America has appreciated the prompt and cooperative attention with which the Department has treated these permit applications. We would like to have the opportunity to meet with your staff to discuss these suggestions and comments. Since the 14 day period for formal and informal response to the draft permits is approaching its end, we are arranging under separate cover to petition for an extension of that period to ensure that we have the opportunity to meet and to resolve any issues which may remain on these important constuction permits.

Please direct any further questions or comments to Roger Hagan at (904) 261-5551.

Sipcerely,

Paul J. Magnell General Manager

PJM/js

cc: E. E. Frey - FDER, Jax

bcc: R. P. Hagan

R. L. Caffo

C. L. Hardy

R. C. Cobb - Clayton Legal
R. H. Williams - Jax Central

Bruce Mitchell - FDER, Tallahassee

Steve Smallwood -

Terres Oertel-& Hoffman

90 New 1988 Jacksmull, F

Tile Copy



JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276

ALTON, ILLINOIS 62002-2276

618/463-6000

RECEIVED

MAR 3 1 1988

DER - BAQM

Reply to: Containerboard Mill Division

1915 WIGMORE STREET P.O. BOX 150 JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

March 29, 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

SUBJECT: TRS Rule Compliance

Digester System

Permit No. AC16-141869

Jefferson Smurfit Corporation

Jacksonville Mill

Dear Mr. Fancy:

Pursuant to the revised compliance schedule submitted for the Department's approval on February 9, 1988, and to the requirement of 17-2.960(1) (b) FAC, this is to certify that the purchase orders described below have been issued for equipment required in the replacement of the digester system, Permit No. AC 16-141869, at the Jacksonville Mill of the Jefferson Smurfit Corporation.

Purchase Order No. 13C10805

Date of Issue February 23, 1988
Items: Five batch digester tanks

One white liquor accumulator tank

One metal trap tank

Purchase Order No. 13C10807

Date of Issue March 14, 1988

Item: One black liquor accumulator tank

Purchase Order No. 13C10808

Date of Issue: March 18, 1988

Item: One blow tank





JEFFERSON SMURFIT CORPORATION

P.O. BOX 150 JACKSONVILLE, FLORIDA 32201

MARSO THE STREET OF THE STREET

CERTIFIED MAIL
RETURN RECEIPT REQUESTED



MR. C. H. FANCY, P.E.
DEPUTY CHIEF
BUREAU OF AIR QUALITY MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL REGULATIONS
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

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Mr. C. H. Fancy, P.E. March 29, 1988 Page -2-

Should there be any questions, please call Gene Tonn at (904) 353-3611 or write to me at the address above.

Very truly yours,

JFM/m1c

J. Franklin Mixson Vice President - Gen. Mgr.

c.c. Khurshid Mehta, P.E. Jacksonville BESD

Copied: Bruce Mitchell }
Produce Roval } 3.31.88
CHF/BT

SENDER: Complete items 1 and 2 when additional se	rvices are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" space on the reversal from being returned to you. The return receipt fee will delivered to and the date of delivery. For additional fees to postmaster for fees and check box(es) for additional serving. Show to whom delivered, date, and addressee's additional serving.	vill provide you the name of the person the following services are available. Consult ce(s) requested.
3. Article Addressed to: Mr. J. Franklin Mix5 on	4. Article Number P 274 010 441
Jefferson Smurfit Corporation 1915 Wigmore Street P.O. Box 150 Jacksonville, FL 32201	Type of Service: Registered Insured Certified COD Express Meil
3201	Always obtain algnature of addressee or agent and DATE DELIVERED.
5. Signature – Addressee X 6. Signatura – Agent X 7. Date of Delivery	8. Addressee's Address (ONLY if requested and fee paid)
S Form 3811 Feb. 1986	DOMESTIC RETURN RECEIPT

P 274 010 441

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

9	(See Reverse)	
80-79	Schoo Franklin Mixso Jefferson Smurfit	Corn
₩ U.S.G.P.O. 1985-480-794	Super Programme Stre	et
.P.O.	P.O. Box 150 P.O. State and ZIP Code Jacksonville, FL	32201
U.S.G	Postage	S
<i>\$</i>	Certified Fee	
45	Special Delivery Fee	
	Restricted Delivery Fee	
S.	Return Receipt showing to whom and Date Delivered	
e 198	Return Receipt showing to whom, Date, and Address of Delivery	
, Jun	TOTAL Postage and Fees	S
3800	Postmark or Date	
s rorm 380g, June 1985	Mailed: 03-22-88 Permit: AC 16-141	869

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. J. Franklin Mixson Jefferson Smurfit Corporation 1915 Wigmore Street Post Office Box 150 Jacksonville, Florida 32201

March 22, 1988

Enclosed is permit No. AC 16-141869, for Jefferson Smurfit Corporation to construct a new batch digester system consisting of five 6200 cu. ft. digesters with an automated operation system, associated Blow Tank/Blow Heat Condensing System, and Turpentine Recovery System. An associated noncondensible gas handling system will be installed to collect and transport all of the new batch digester system's TRS emissions to the No. 3 Lime Kiln, where the gases will be incinerated. The maximum daily pulp production rate will be 1250 TPD ADP (tons per day of air dried pulp). The location of the project will be at the Jefferson Smurfit's existing facility 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,

Jefferson Smurfit Corporation March 22, 1988 Page 2

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. Fancy, P.E.

Deputy Chief

Bureau of Air Quality Management

Copy furnished to:

B. Pittman, Esq., DER

K. Mehta, BESD

B. Williams, JSC

J. Cox, JSC

D. Buff, P.E., KBN

Final Determination

Jefferson Smurfit Corporation
Duval County
Jacksonville, Florida

Permit No. AC 16-141869

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

Final Determination

The construction permit application has been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in The Florida Times Union on February 16, 1988. The Technical Evaluation and Preliminary Determination were available for public inspection at the Duval County's Bio-Environmental Services Division office in Jacksonville and the DER's Bureau of Air Quality Management office in Tallahassee.

Comments were received from Mr. J. Franklin Mixson, Vice President and General Manager of Jefferson Smurfit Corporation, Jacksonville mill, on February 12, 1988. The Bureau's responses to the comments will follow:

A. Technical Evaluation and Preliminary Determination (TE & PD)

The comments are acknowledged and the referenced letter will become an attachment to the permit. Since there are not any substantive changes to the TE & PD requested that would require further emissions review, there will not be any changes made to the TE & PD.

- B. Construction Permit
 - 1. General
 - a. Expiration Date

The Bureau agrees with the request to change the expiration date:

From: August 10, 1989 To: February 12, 1990

- 2. Cover Page
 - a. 2nd Paragraph, Line 4

The Bureau does not feel that testing requirements belong in the description of the project, but should be in the Specific Conditions. Since the multiple effect evaporator system's permit contains a maximum limit for processing black liquor solids (BLS), a limit of BLS product will not be placed on the batch digester system. Turpentine by product from the batch digester system's operation will also not be capped, since the most independent parameter (pulp) will be capped and regulated. Therefore, the following will be changed and added:

From: The maximum daily pulp production will be 1250 TPD ADP (tons per day of air dried pulp).

To: The maximum hourly production rate shall not exceed 89.08 TPH ADP (tons per hour of air dried pulp and based on a nominal utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white/black liquor). The maximum daily production rate shall not exceed 1250 TPD ADP (tons per day of air dried pulp) and will be used for PSD (prevention of significant deterioration) review purposes.

3. Specific Conditions

a. No<u>. 2</u>

Since 89.08 TPH ADP is the maximum permitted production rate, at which demonstration of compliance is required, the word "only" is not appropriate. The 1250 TPD ADP is also a maximum production rate, enforceable, and is the basis for PSD review, because it allows the flexibility in the batch digester system's operation on a daily basis and lends consideration to potential down time with the batch digester system. The word "maximum" will be used for the work "peak", which is defined by Webster as "being at or reaching the maximum." Therefore, the following will be changed and added:

From: The peak production rate shall not exceed 89.08 TPH ADP (tons per hour of air dried pulp; based on a utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white liquor), 234,608 lbs/hr black liquor solids (dry), and 706 lbs/hr turpentine. The maximum daily production rate shall not exceed 1250 TPD ADP (tons per day of air dried pulp).

To: The maximum production rate shall not exceed 89.08 TPH ADP (based on a nominal utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white/black liquor). For operation and PSD review purposes, the maximum daily production rate shall not exceed 1250 TPD ADP.

b. <u>No. 3</u>

The Bureau agrees with the request and the following will be changed:

From: The permittee shall not discharge from the batch digester system any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen unless the gases are combusted in the No. 3 lime kiln, from which the exhaust gases shall not contain TRS in excess of 8 ppm by volume on

a dry basis, corrected to 10 percent oxygen (in accordance with 40 CFR 60.283(a)(1)(i)).

To: The permittee shall not discharge from the batch digester system any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen unless the gases are combusted in the No. 3 lime kiln, from which the exhaust gases shall not contain TRS in excess of 8 ppm by volume on a dry basis, corrected to 10 percent oxygen (in accordance with 40 CFR 60.283(a)(1)).

c. No. 4

The Bureau agrees with the request since the assumption is part of the TE & PD, which is an attachment to the permit. Therefore, the following will be changed:

From: For inventory and PSD tracking purposes, the TRS potential emissions from the batch digester system will be considered zero (based on the permittee's control strategy and to be verified by conducting a verification test using EPA Methods 3 and 16 according to 40 CFR 60, Appendix A).

To: Deleted. See the Final Determination.

d. No. 9

The Bureau agrees with the request and the following will be changed and added:

From: The project shall provide proof of compliance with FAC Rule 17-2.960(1)(d)1.b., by May 12, 1989, to the Duval County's Department of Health, Welfare and Bio-Environmental Services Division (BESD).

To: The permittee shall provide proof of compliance with FAC Rule 17-2.960(1)(d)1.b., by May 12, 1989, to the Duval County's Department of Health, Welfare and Bio-Environmental Services Division (BESD).

e. <u>No. 10</u>

The Bureau agrees with the request and the following will be changed:

From: The expiration date of this permit coincides with the 90 days required to process a complete application for an operating permit after the final compliance date, in accordance with FAC Rule 17-4.

To: Deleted. See the Final Determination.

f. No. 12

The Bureau agrees with the requests and the following will be changed and added:

From: The BESD's office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the BESD's office within 45 days of the test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction and achieve final compliance on schedule, the BAQM's office and the BESD's office must be notified in writing 60 days prior to the final compliance date of the construction permit and the permittee shall submit appropriate information pursuant to FAC Rule 17-2.960(1)(e).

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the BESD's office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (Rules 17-2 and 17-4, FAC).

If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application. (Rule 17-4, FAC)

To: The BESD's office shall be notified in writing 15 days prior to source testing pursuant to FAC Rule 17-2.700(2)(a)5. Written reports of the tests shall be submitted to the BESD's office within 45 days of the test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction and

achieve final compliance on schedule, the BAQM's office and the BESD's office must be notified in writing 60 days prior to the final compliance date of the construction permit and the permittee shall submit appropriate information pursuant to FAC Rule 17-2.960(1)(e).

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit an application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the BESD's office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. (FAC Rules 17-2 and 17-4).

If the construction permit expires prior to the permittee requesting an extension or filing an application for a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct pursuant to FAC Rule 17-4.

g. No. 13

The Bureau agrees with the request and the following will be changed and added:

From: Any change in the method of operation, raw materials, equipment or operating hours shall be submitted for approval to the BESD's office and the BAOM's office.

To: Any change in the method of operation, raw materials or chemicals processed, equipment or operating hours shall be submitted for approval to the BESD's office and the BAQM's office pursuant to 40 CFR 60.14.

h. No. 14

The Bureau agrees with the request and the following will be changed and added:

From: The existing batch digester system shall be in final compliance (retired from service and all related permits surrendered to the Department or BESD) by May 12, 1989.

To: The existing batch digester system shall be in final compliance (retired from service and all related

permits surrendered to the Department or BESD) by May 12, 1989, or comply with FAC Rule 17-2.960(1)(e).

i. No. 15

The Bureau agrees with the request and the following will be changed and added:

The No. 3 Lime Kiln shall be tested for TRS and From: SO2 emissions after the new batch digester system's TRS noncondensible gas handling system has been connected to it and the system is operating properly (40 CFR 60.8). The TRS emissions test, using EPA Methods 3 and 16 pursuant to 40 CFR 60, Appendix A, shall be used to verify complete destruction of the pollutant. The SO2 emissions test, using EPA Method 6 pursuant to 40 CFR 60, Appendix A, shall be used to establish the overall removal efficiency of the No. 3 Lime Kiln and its associated wet scrubber system by comparing the test results with previously performed tests (initial compliance test: AC 16-095614). results of the two tests and their comparisons to previous tests will be used to rule out or require further emissions review pursuant to FAC Rule 17-2.500 and to assess the appropriate processing fee pursuant to FAC Rule 17-4, of which \$100.00 (less than 25 TPY potential emissions) has already been received.

The No. 3 Lime Kiln shall be tested for TRS and SO₂ emissions after the new batch digester system's TRS noncondensible gas handling system has been connected to it and the system is operating properly (40 CFR 60.8). The TRS emissions tests, using EPA Methods 3 and 16 or 16A pursuant to 40 CFR 60, Appendix A, shall be used to verify compliance with the TRS emission limit pursuant to 40 CFR 60.283(a)(1)(i). The SO_2 emissions tests, using EPA Method 6 pursuant to 40 CFR 60, Appendix A, shall be used to establish the overall removal efficiency of the No. 3 Lime Kiln and its associated wet scrubber Two tests for SO₂ will be performed. will be one test without incinerating digesting TRS gas in the kiln and one test while incinerating digesting TRS gas in the kiln. The results of the two tests will be used to rule out or require further emissions review pursuant to FAC Rule 17-2.500 and to assess the appropriate processing fee pursuant to FAC Rule 17-4, of which \$100.00 (less than 25 TPY potential emissions) has already been received.

j. No. 16

The Bureau agrees with the request and the following will be changed and added:

From: The No. 3 Lime Kiln's permit, No. AC 16-095614, shall be amended to reflect the intent of this permit and to identify that it will be receiving TRS emissions from the new batch digester system. The permittee of AC 16-095614 shall request an amendment to the permit at least 90 days prior to the final compliance date of May 12, 1989.

To: The No. 3 Lime Kiln permit, No. AC 16-095614, or any succeeding permit shall provide for the incineration of the TRS emissions from the new batch digester system. The permittee of AC 16-095614, or any succeeding permit shall insure that the above provision is incorporated in that permit prior to the final compliance date.

4. Attachments to be Incorporated:

- 8. Mr. J. Franklin Mixson's letter dated February 12, 1988, and received February 12, 1988.
- 9. Mr. Jerry E. Woosley's letter dated February 12, 1988, and received February 19, 1988.

The Bureau will incorporate the changes in the appropriate construction permit, as referenced above in the final determination. It is recommended that the construction permit be issued as drafted, with the above revisions and attachments incorporated.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

PERMITTEE:
Jefferson Smurfit Corp.
1915 Wigmore Street
P. O. Box 150
Jacksonville, FL 32201

Permit Number: AC 16-141869
Expiration Date: February 12, 1990
County: Duval
Latitude/Longitude: 30° 22' 00"N/
81° 37' 30" W

Project: Batch Digester System

This permit is issued under the provisions of Chapter $\frac{403}{17-2}$, Florida Statutes, and Florida Administrative Code Rule(s) $\frac{17-2}{17-2}$ and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved 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 construction of five 6200 cu. ft. digesters, associated Blow Tank/Blow Heat Condensing System and Turpentine Recovery System, and associated TRS noncondensible gas handling system. The maximum hourly production rate shall not exceed 89.08 TPH ADP (tons per hour of air dried pulp and based on a nominal utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white/black liquor). The maximum daily production rate shall not exceed 1250 TPD ADP (tons per day of air dried pulp) and will be used for PSD (prevention of significant deterioration) review purposes. The location of the project will be at Jefferson Smurfit Corporation's existing facility in Jacksonville, Duval County, Florida. The UTM coordinates are Zone 17, 439.8 km East and 3359.4 km North.

The Standard Industrial Codes are: Industry No. 2621-Paper Mills
The Standard Classification Codes are: Pulp & Paper Industry
Major Group 26: Sulfate (Kraft) Pulping

o Digester Relief & Blow Tank 3-07-001-01

o Turpentine Condenser 3-07-001-07

o Accumulator 3-07-001-99

Construction will be in accordance with the permit application, plans, documents, and reference material submitted unless otherwise stated in the General and Specific Conditions.

Attachments to be Incorporated:

- 1. Mr. J. Franklin Mixson's cover letter and application package dated November 9, 1987, and received November 12, 1987.
- Mr. J. E. Woosley's letter dated/received December 10, 1987.

Permit Number: AC 16-141869 Expiration Date: February 12, 1990

ATTACHMENTS (continued):

- 3. Mr. C. H. Fancy's letter dated December 11, 1987.
- 4. Mr. J. Franklin Mixson's letter dated January 6, 1988, and received January 11, 1988.
- 5. Mr. J. Franklin Mixson's letter on a petition dated January January 18, 1988, and received January 19, 1988.
- 6. Mr. J. Franklin Mixson's letter of additional information dated January 18, 1988, and received January 19, 1988.
- 7. The Technical Evaluation and Preliminary Determination dated January 25, 1988.
- 8. Mr. J. Franklin Mixson's letter dated February 12, 1988, and received February 12, 1988.
- received February 12, 1988.

 9. Mr. J. E. Woosley's letter dated February 12, 1988, and received February 19, 1988.

PERMITTEE: Permit Number: AC 16-141869
Jefferson Smurfit Corp. Expiration Date: February 12, 1990

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 Plorida Statutes and Department rules, unless specifically authorized by an order from the Department.

Permit Number: AC 16-141869 Expiration Date: February 12, 1990

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;
 - Inspecting the facility, equipment, practices, or operations regulated or required under this permit;
 and
 - c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

Permit Number: AC 16-141869 Expiration Date: February 12, 1990

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 noncompliance 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)
 - (x) 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.

Permit Number: AC 16-141869
Expiration Date: February 12, 1990

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. The project may operate continuously (i.e., 8760 hrs/yr).
- 2. The maximum production rate shall not exceed 89.08 TPH ADP (based on a nominal utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white/black liquor). For operation and PSD review purposes, the maximum daily production rate shall not exceed 1250 TPD ADP.

Permit Number: AC 16-141869 Expiration Date: February 12, 1990

SPECIFIC CONDITIONS:

- 3. The permittee shall not discharge from the batch digester system any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen unless the gases are combusted in the No. 3 lime kiln, from which the exhaust gases shall not contain TRS in excess of 8 ppm by volume on a dry basis, corrected to 10 percent oxygen (in accordance with 40 CFR 60.283(a)(1)).
- 4. Deleted. See the Final Determination.
- 5. The batch digester system is subject to the requirements of Florida Administrative Code (FAC) Rule 17-2.660(3), General Provisions.
- 6. Operation reports and records shall be in accordance with 40 CFR 60 284(d), Monitoring of Emissions and Operations, and FAC Rule 17-2.710(4), Continuous Monitoring Requirements.
- 7. The initial and annual compliance tests shall be conducted in accordance with 40 CFR 60.285, Test Methods and Procedures. The initial compliance test shall be in accordance with 40 CFR 60.8.
- 8. All process equipment shall be inspected regularly and maintained in good operating condition to minimize fugitive gaseous emissions.
- 9. The permittee shall provide proof of compliance with FAC Rule 17-2.960(1)(d)1.b., by May 12, 1989, to the Duval County's Department of Health, Welfare and Bio-Environmental Services Division (BESD).
- 10. Deleted. See the Final Determination.
- 11. This project shall comply with all the applicable requirements of FAC Rules 17-2 and 17-4, and 40 CFR 60, Subpart BB, Standards of Performance for Kraft Pulp Mills.
- 12. The BESD's office shall be notified in writing 15 days prior to source testing pursuant to FAC Rule 17-2.700(2)(a)5. Written reports of the tests shall be submitted to the BESD's office within 45 days of the test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction and achieve final compliance

Permit Number: AC 16-141869 Expiration Date: February 12, 1990

SPECIFIC CONDITIONS:

on schedule, the BAQM's office and the BESD's office must be notified in writing 60 days prior to the final compliance date of the construction permit and the permittee shall submit appropriate information pursuant to FAC Rule 17-2.960(1)(e).

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit an application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the BESD's office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. (FAC Rules 17-2 and 17-4).

- If the construction permit expires prior to the permittee requesting an extension or filing an application for a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct pursuant to FAC Rule 17-4.
- 13. Any change in the method of operation, raw materials or chemicals processed, equipment or operating hours shall be submitted for approval to the BESD's office and the BAQM's office pursuant to 40 CFR 60.14.
- 14. The existing batch digester system shall be in final compliance (retired from service and all related permits surrendered to the Department or BESD) by May 12, 1989, or comply with FAC Rule 17-2.960(1)(e).
- 15. The No. 3 Lime Kiln shall be tested for TRS and SO₂ emissions after the new batch digester system's TRS noncondensible gas handling system has been connected to it and the system is operating properly (40 CFR 60.8). The TRS emissions tests, using EPA Methods 3 and 16 or 16A pursuant to 40 CFR 60, Appendix A, shall be used to verify compliance with the TRS emission limit pursuant to 40 CFR 60.283(a)(l)(i). The SO₂ emissions tests, using EPA Method 6 pursuant to 40 CFR 60, Appendix A, shall be used to establish the overall removal efficiency of the No. 3 Lime Kiln and its associated wet scrubber system. Two tests for SO₂ will be performed. There will be one test without incinerating digesting TRS gas in the kiln and one test while incinerating digesting TRS gas in the kiln. The results of the two tests will be used to rule out or require further emissions

Permit Number: AC 16-141869 Expiration Date: February 12, 1990

SPECIFIC CONDITIONS:

review pursuant to FAC Rule 17-2.500 and to assess the appropriate processing fee pursuant to FAC Rule 17-4, of which \$100.00 (less than 25 TPY potential emissions) has already been received.

- 16. The No. 3 Lime Kiln permit, No. AC 16-095614, or any succeeding permit shall provide for the incineration of the TRS emissions from the new batch digester system. The permittee of AC 16-095614, or any succeeding permit shall insure that the above provision is incorporated in that permit prior to the final compliance date.
- 17. The batch digester system and its control system are subject to the provisions of FAC Rule 17-2.600(4)(c)1.c.
- 18. Objectionable odors shall not be allowed off of the plant property pursuant to FAC Rule 17-2.620(2).

Issued this \mathscr{B}

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

		For Routing To Other Than The Addressee		
TO:	Dale Twachtmann	To:	Location:	
FROM:	Howard L. Rhodes	To:	Location:	
SUBJ:	Approval of State Construction Jefferson Smurfit Corporation	Permit No. AC 16-	141869	

DATE: March 17, 1988

Attached for your approval and signature is a permit prepared by Central Air Permitting for the above mentioned company to install/construct a new batch digester system consisting of five 6200 cu. ft. digesters with an automated operation system, associated blow tank/blow heat recovery system, turpentine recovery system, and an associated noncondensible gas handling system to collect and transport the batch digester system's gaseous emissions to the No. 3 Lime Kiln, where the gases will be incinerated. The project will occur at Jefferson Smurfit Corporation's existing facility located in Jacksonville, Duval County, Florida. Comments were received during the public notice period.

Day 90, after which this permit will be issued by default, is May 16, 1988.

I recommend your approval and signature.

HLR/aqm/bm

attachments

RECEIVED MAR 21 1988

DER-BAQM

State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

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

FROM: Howard L. Rhodes

Dale Twachtmann

TO:

SUBJ: Approval of State Construction Permit No. AC 16-141869

Jefferson Smurfit Corporation

DATE: March 17, 1988

Attached for your approval and signature is a permit prepared by Central Air Permitting for the above mentioned company to install/construct a new batch digester system consisting of five 6200 cu. ft. digesters with an automated operation system, associated blow tank/blow heat recovery system, turpentine recovery system, and an associated noncondensible gas handling system to collect and transport the batch digester system's gaseous emissions to the No. 3 Lime Kiln, where the gases will be incinerated. The project will occur at Jefferson Smurfit Corporation's existing facility located in Jacksonville, Duval County, Florida. Comments were received during the public notice period.

Day 90, after which this permit will be issued by default, is May 16, 1988.

I recommend your approval and signature.

HLR/aqm/bm

attachments

RECEIVED

MAR 21 1988

DER - BAQM



FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA	
COUNTY OF DUVAL	

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Before the unde	ersigned authority personally appeared _	Bill Champion
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was published in .	The Florida Times Union	
	February 16, 1988	
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RECEIVED

FEB 19 1988

DER-BAOM

State of Florida
Department of Environmental Regulation
Notice of Intent
The Department of Environmental Regulation
hereby gives notice of its intent to issue a permit to Jefferson Smurfit Corporation to construct a new batch digester system consisting of five 6200 cu. ft. digesters with an automated operation system, associated Blow Tank/Blow Heat Condensing System, and Turpentine Recovery System. An associated noncondensible gas handling system will be installed to collect and transport oil of the new batch digester system's TRS emissions to the No. 3 Lime, Kiln, where the gases will be incinerated. The design dolly production rate will be 1250 TPD ADP (tons per day of air dried pulp). The location of the project will be at Jefferson Smurfit's existing facility in Jacksonville, Duval County, Florida. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition, for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the reaulrements of Chapters 17-103 and 28-5. Florida Administrative Code, and must be filled (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tollahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) in not proposed agency action. Accordingly, the Department's Office of General Counsel, 2800 Apalachee Parkway. Talianashee, Florida 3239-2400, Failure to define with the hearing officer in one has been assigned to the ministrative hearing hearing and be filled with the hearing officer has been assigned, the petition to intervene in the proceedings. A petition to intervene within the allowed time frame constitu

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 a.m. Monday through Friday, except legal holidays, at:
Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tollahassee, Florida 32399-2400
Department of Health Welfare and Blo-Environmental Services
515 West 6th Street
Jacksonville, Florida 32206-4397
Any person may send written comments on the proposed action to Mr. Bill Thomas 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.

Copied Bruce Mitchell 2/25/2 Pradeep Raval Knurshid Mcha, BESD)

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7	STANDARD AIR - Delivery is generally next business day or not later than second business day. It may take three or more business days if the destination is outside our primary service areas.	10			9930	Date/Time Received FedEx Employee Number	#106001 FEC-S-751-1000
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JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 **ALTON, ILLINOIS 62002-2276**

618/463-6000

February 18, 1988

FEDERAL EXPRESS

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

P.O. BOX 150

JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

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

Permit No. AC16-141869

Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Pursuant to instructions included in the Intent To Issue of the proposed permit No. AC16-141869, enclosed is proof of publication of the Notice of Intent in the Tuesday, February 16, 1988 edition of the Florida Times Union, for the new digesting system to be installed at the Jacksonville Mill of Jefferson Smurfit Corporation.

Very truly yours,

Vice President and General Manager

JFM/nm1

Enclosure



Envelope was moide Federal Express package.

MR. C. H. FAMCY, P.E.
DEPUTY CHIEF
BUREAU OF AIR QUALITY MANAGEMENT
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

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DEPARTMENT OF HEALTH, WELFARE & BIO-ENVIRONMENTAL SERVICES

Bio-Environmental Services Division Air and Water Pollution Control

February 12, 1988



Mr. Bill Thomas, P.E. Bureau of Air Quality Management Department of Environmental Regulation 2600 Blairstone Road Tallahassee, FL 32301

Re: Jefferson Smurfit Corporation, Jacksonville, FL **New Batch Digester System**

Proposed Permit No. AC16-141869

Dear Mr. Thomas:

The BESD has reviewed the captioned item and has determined it to be complete. The Central Air Permitting Staff is to be congratulated in the preparation of a very important permit in a restricted time frame.

If BESD may be of further assistance in this matter, please advise.

Very truly yours,

Jerry 4. Woosley

Air Pollution Control Engineer

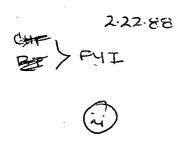
JEW/mh

cc: BESD File 1010

Mr. Bill Stewart, P.E., DER

disc 4mh/21

Copied Bruce Mitchell > 2.22.88 COPIED CHEIBT





JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 ALTON, ILLINOIS 62002-2276

618/463-6000

Reply to: Containerboard Mill Division

1915 WIGMORE STREET
P.O. BOX 150
JACKSONVILLE, FL 32201
TELEPHONE: 904/353-3611

February 12, 1988

DER

Mr. Bill Thomas Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2600

BAQM

Re: Comments on Technical evaluation and preliminary determination and proposed permit for Jefferson Smurfit new batch digester system AC 16-141869

Dear Mr. Thomas:

This letter is to provide the subject comments which are based on agreements developed in the meeting with you, Mr. Mitchell and Mr. Raval for DER and Mr. Cox and Mr. Millican for Jefferson Smurfit on February 11, 1988.

We appreciate your cooperation and counsel in developing the final conditions for the permit.

Technical evaluation and preliminary determination

On page 3, in the first paragraph on the fourth line delete "total destruction of the TRS gases" and insert "compliance with TRS emission limits".

In paragraph 7 on line two insert "to atmosphere" after "emissions". On line five after "verify" delete "that there is not an increase in TRS emissions in" and insert "compliance with TRS emissions from." On line six after "16" insert "or 16A". Beginning on line seven after "performed" delete the remainder of the paragraph. Replace with "two tests for TRS will be performed. There will be one test without incinerating digesting TRS gas in the kiln and one test while incinerating digesting TRS gas in the kiln. The results of these two tests will be used to rule out or require further emission review pursuant to FAC Rule 17-2.500, PSD.

FROM:

LAW OFFICES

OERTEL & HOFFMAN

A PROFESSIONAL ASSOCIATION
POST OFFICE BOX 6507
TALLAHASSEE, FLORIDA 32314-6507

TO:

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fl 32399-2600

BY HAND DELIVERY

DER

FEB **12**

BAQM

Mr. Bill Thomas February 12, 1988 Page Two

On page 4, line 1 after "(40 CFR 60.8)" delete the remainder of the paragraph. Insert "Two tests for SO2 will be performed. There will be one test without incinerating digesting TRS gas in the kiln and one test while incinerating digesting TRS gas in the kiln. The results of these two test will be used to rule out or require further emissions review pursuant to F.A.C. Rule 17-2.500, PSD. Also on page 4, 4th line of last paragraph change "any" to "an". Also on page 4 in the 5th line of the last paragraph insert "above those stated above" between "kiln" and "established".

On page 6, 4th paragraph, line 7 after "comparisons" insert "of mass emissions." and delete the remainder of the paragraph.

On page 6, 5th paragraph, line 6 insert a "period" after "established" ending the sentence. Delete the remainder of the paragraph and insert "Two tests for SO_2 will be performed. There will be one test without incinerating digesting TRS gas in the kiln and one test while incinerating digesting TRS gas in the kiln. The results of these two tests will be used to rule out or require further emission review pursuant to F.A.C. Rule 17-2.500, PSD."

Draft Permit

On every page of the permit change expiration date to February 12, 1990.

On page 1, 2nd paragraph, line 4 delete the sentence beginning with "The maximum" and insert:

"For testing purposes only the peak production rate shall not exceed 89.08 TPH ADP (tons per hour of air dried pulp: based on a projected utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white liquor, 234,608 lbs/hr black liquor solids (dry) and 706 lbs/hr turpentine). For PSD purposes only, the maximum daily production rate shall not exceed 1250 TPD ADP (tons per day of air dried pulp)."

Mr. Bill Thomas February 12, 1988 Page Three

Specific Conditions

- 1. No change
- 2. Delete S.C. 2 and replace with:

 For testing purposes only, the peak production rate shall not exceed 89.08 tons per hour air dried pulp. For PSD purposes only, the maximum daily production rate shall not exceed 1250 tons per day air dried pulp.
- 3. Change line 7 from 60.283(a)(1)(i) to 60.283(a)(1).
- 4. Delete
- 5. No change
- 6. No change
- 7. No change
- 8. No change
- 9. Change the word "project" to "permittee" and after (BESD) add "or request in writing that the Secretary or Secretary's designee grant an extension of time pursuant to 17-2.960(1)(e).
- 10. Delete
- 11. No change
- 12. On line 2 after "testing" insert "pursuant to F.A.C. 17-2.700 (2)(a)5.

2nd paragraph of S.C. 12 - no change

3rd paragraph of S.C. 12, line 3 delete the word "complete". On line 8 delete sentence beginning "Operation beyond". Retain the reference to Rule 17-2 and 17-4 F.A.C.

4th paragraph of S.C. 12 on line 2 delete the word "obtaining" and insert "filing on application for". On line 4 delete remainder after "construct" and insert "pursuant to Chapter 17-4 F.A.C.

- 13. Insert after "raw materials" the words "or chemicals processed" and insert after "office" the words "pursuant to 40 CFR 60.14."
- 14. After "1989" insert "or comply with F.A.C. 17-2.960(1)(e)."
- 15. Change S.C. 15 to read:

The No. 3 Lime Kiln shall be tested for TRS and SO? emissions after the new batch digester system's TRS noncondensible gas handling system has been connected to it and the system is operating properly (40 CFR 60.8). The TRS emissions test, using EPA Methods 3 and 16 or 16A pursuant to 40 CFR 60, Appendix A, shall be used to verify compliance with the TRS emission limit pursuant to 40 CFR 60.283(a)(1)(i). The SO₂ emissions test, using EPA Method 6 pursuant to 40 CFR 60, Appendix A, shall be used to establish the overall removal efficiency of the No. 3 Lime Kiln and its associated wet scrubber system. Two tests for SO₂ will be performed. There will be one test without incinerating digesting TRS gas in the kiln and one test while incinerating digesting TRS gas in the kiln. The results of these two tests will be used to rule out or require further emissions review pursuant to F.A.C. Rule 17-2.500 and to assess the appropriate processing fee pursuant to F.A.C. Rule 17-4, of which \$100.00 (less than 25 TPY potential emissions) has already been received.

16. Change S.C. 16 to read:

The No. 3 Lime Kiln permit, No. AC 16-095614, or any succeeding permit shall provide for the incineration of the TRS emissions from the new batch digester system.

The permittee of AC 16-095614, or any succeeding permit shall insure that the above provision is incorporated in that permit prior to the final compliance date.

- 17. No change.
- 18. No change.

This completes the written comments which are based on the agreements reached in the aforementioned meeting.

We sincerely appreciate the cooperation from you and your staff.

Jefferson Smurfit Corporation is looking forward to completion of this TRS reduction project and to improving the quality of life in Florida. Receipt of the final permit is essential for us to proceed with this project. Anything you can do to expedite the issuance of this permit will be appreciated.

If you have any questions concerning these comments, please call Mr. Jerry Cox at 353-3611 or write to me at the above address.

Sincerely,

/J. Franklin Mixson Vice President and General Manager Jacksonville Mill

Jang B Cox

JFM:slt 1116/044/TC-C

K. Mehta, BESD

Copiedi Bruce Mitchell)
Prodeep Roval (2.15.88 m)
Max Linn
CHF/BT

Final edition to be supmitted. Ba DER

AC 16-141869

SPECIFIC CONDITIONS:

FEB 11 1988 FM

1. The project may operate continuously (i.e., 8760 hrs/yr.).

For testing and PSD determination only, the maximum permitted capacity of this source is 1250 TPD ADP (tons per day of air dried pulp).

- 3. TRS gases will be collected and incinerated in the Number 3 Lime Kiln and the exhaust gases from the kiln will not exceed 8 ppm by volume on a dry basis corrected to 10 percent oxygen (in accordance with 40 CFR 60.283 (a)(1)(i).).
- 4. Delete.
- 5. The batch digester system is subject to the requirements of Florida Administrative Code (FAC) Rule 17-2.660(3), General Provisions.
- 6. Operation reports and records shall be in accordance with 40 CFR 60 284(d), Monitoring of Emissions and Operations, and FAC Rule 17-2.710(4), Continuous Monitoring Requirements.
- 7. The initial and annual compliance tests shall be conducted in accordance with 40 CFR 60.285, Test Methods and Procedures. The initial compliance test shall be in accordance with 40 CFR 60.8.
- 8. All process equipment shall be inspected regularly and maintained in good operating condition to minimize fugitive gaseous emissions.
- 9. The Permittee shall provide proof of compliance with FAC Rule 17-2.960(1)(d)1.b., by May 12, 1989, to the Duval County's Department of Health, Welfare and Bio-Environmental Services Division (BESD) or request in writing that the Secretary or the Secretary's designee grant an extension of time pursuant to 17-2.960(1)(e).
- 10. The expiration date of this permit coincides with the 90 days required to process a complete application for an operating permit after the final compliance date, in accordance with FAC Rule 17-4.
- 11. This project shall comply with all the applicable requirements of FAC Rules 17-2 and 17-4, and 40 CFR 60, Subpart BB, Standards of Performance for Kraft Pulp Mills.
- 12. The BESD's office shall be notified in writing 15 days prior to source testing pursuant to 17-2.700(2)(a)5. Written reports of the tests shall be submitted to the BESD's office within 45 days of the test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction and achieve final compliance on schedule, the BAQM's office and the BESD's office must be notified in writing 60 days prior to the final compliance date of the construction permit and the permittee shall submit appropriate information pursuant to FAC Rule 17-2.960(1)(e).

SPECIFIC CONDITIONS: 12 continued

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit an application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the BESD's office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date.

If the construction permit expires prior to the permittee requesting an extension or filing an application for a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct pursuant to Chapter 17-4, FAC.

- 13. Any change in the method of operation, raw materials, equipment or operating hours shall be submitted for approval to the BESD's office and the BAQM's office pursuant to 40 CFR 60.14.
- 14. The existing batch digester system shall be in final compliance (retired from service and all related permits surrendered to the Department or BESD) by May 12, 1989 or comply with Chapter 17-2.960(1)(e).
- 15. The No. 3 Lime Kiln shall be tested for TRS and SO₂ emissions after the new batch digester system's TRS noncondensible gas handling system has been connected to it and the system is operating properly (40 CFR 60.8). The TRS emissions test, using EPA Methods 3 and 16 or 16A pursuant to 40 CFR 60, Appendix A, shall be used to verify compliance with the TRS emission limit pursuant to 40 CFR 60.283(a)(1)(i). The SO₂ emissions test, using EPA Method 6 pursuant to 40 CFR 60, Appendix A, shall be used to establish the overall removal efficiency of the No. 3 Lime Kiln and its associated wet scrubber system.

Two tests for SO₂ will be performed when—the—digesting—TRS—gas collection—system—is—complete—and—ready—to—deliver—TRS—gas—to—the—kiln. There will be one test without incinerating digesting TRS gas in the kiln and one test while incinerating digesting TRS gas in the kiln. The results of these two tests will be used to rule out or require further emissions review pursuant to FAC Rule 17-2.500 and to assess the appropriate processing fee pursuant to FAC Rule 17-4, of which \$100.00 (less than 25 TPY potential emissions) has already been received.

SPECIFIC CONDITIONS:

- 16. The No. 3 Lime Kiln's permit, No. AC 16-142989, reflects the conditions of this permit and identifies that it will be receiving TRS emissions from the new batch digester system.
- 17. The batch digester system and its control system are subject to the provisions of FAC Rule 17-2.600(4)(c)1.c.
- 18. Objectionable odors shall not be allowed off of the plant property pursuant to FAC Rule 17-2.620(2).

Best Available Copy



JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 ALTON. ILLINOIS 62002-2276

618/463-6000

February 9, 1988

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

P.O. BOX 150 JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

DER

FEB 10, 1988

Mr. C. H. Fancy, P.E. Deputy Chief Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32301-8241

RE: Conceptual Compliance Plan TRS Rule Jefferson Smurfit Corporation Jacksonville Mill

Dear Mr. Fancy:

On February 11, 1987, compliance schedules, pursuant to 17-2.960 FAC, were submitted for the following two sources of the Jacksonville Mill of Jefferson Smurfit Corporation:

> Recovery Boiler No. 9 - Permit No. A016-100365 Smelt Dissolving Tank - Permit No. A016-100367

On July 7, 1987, a compliance schedule, pursuant to 17-2.960 FAC was submitted for a new batch digester system to replace the existing batch digester system, Permit No. A016-114777, of the Jacksonville Mill of Jefferson Smurfit Corporation.

The purpose of this letter is to request revisions to certain interim compliance dates in the initial compliance schedules of the three sources identified above. No request is being made to revise the final compliance dates of May 12, 1989 which were submitted in the initial compliance schedules and which are required by 17-2.960 (1)(d) 1.b. and 17-2.960 (1) (d) 2.a.(ii).

The revisions are being requested as a result of the development of equipment engineering and process design, equipment purchase limitations, and construction requirements which better defined the scope and an achievable schedule to accomplish the objective of the projects. The major components of the TRS control measures to be installed on the No. 9 Recovery Boiler and the Smelt Dissolving Tank are to be accomplished during a scheduled shutdown of the No. 9 Recovery Boiler during October 1988.

The requested revisions to certain interim compliance dates in the initial compliance schedules are enclosed as Attachment A.

CERTIFIED MAIL RETURN RECEIPT REQUESTED

BAOM

2-11-88 FYI

Mr. C. H. Fancy, P.E. Deputy Chief Bureau of Air Quality Management February 9, 1988 Page 2

We trust that the Department will approve the revisions to our compliance schedule. Should there be any questions please call Jerry Cox or Gene Tonn at 904/353-3611 or write to me at the above address.

Very truly yours,

J. Franklin Mixson
Vice President and
General Manager

JFM/nm1

Attachment

cc: Khurshid Mehta, P.E. BESD

Copied Bruce Mitchell
Prideep Rous! 2.11.88 mg

ATTACHMENT A REVISED COMPLIANCE SCHEDULE JEFFERSON SMURFIT CORPORATION JACKSONVILLE MILL 17-2.960 FAC

Source - Recovery Boiler No. 9 - ACIG-141868 Permit No. A016-100365

- A. File construction permit application by November 12. 1987.
- B. Provide certification of purchase orders by Februar -- 12,-1988. April 1, 1988
- C. Provide certification of initial construction by Ma=-12,-1988. September 1, 1988.
- D. Complete construction by February 12, 1989.
- E. Final compliance by May 12, 1989.

Source - Smelt Dissolving Tank Vent AC 16-1418-10 Permit No. A016-100367

- A. File construction permit application by November 12. 1987.
- B. Provide certification of purchase orders by February-12,-1988. April 1, 1988. C. Provide certification of initial construction by May-12,-1988. September 1, 1988.
- D. Complete construction by February 12, 1989.
- E. Final compliance by May 12, 1989.

AC16-141868 141869 Source - Digester System Permit No. A016-114777 Replaced with new digester system

- A. File construction permit application by November 12. 1987.
- B. Provide certification of purchase orders by March-12-1988. April 1, 1988.
- C. Provide certification of initial construction by Ma=-12,-1988. August 1, 1988.
- D. Complete construction by February 12, 1989.
- E. Final compliance by May 12, 1989.

Original
File Copy
Rdited and Hand delivered to
Jerry Cox - ISC
John Millian - reg.
2-11-88 consultan

State of Florida

Department of Environmental Regulation

Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Jefferson Smurfit Corporation to construct a new batch digester system consisting of five 6200 cu. ft. digesters with an automated operation system, associated Blow Tank/Blow Heat Condensing System, and Turpentine Recovery System. An associated noncondensible gas handling system will be installed to collect and transport all of the new batch digester system's TRS emissions to the No. 3 Lime Kiln, where the gases will be incinerated. The design daily pulp production rate will be 1250 TPD ADP (tons per day of air dried pulp). The location of the project will be at Jefferson Smurfit's existing facility in Jacksonville, Duval County, Florida. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (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 Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has 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 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 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 32399-2400. 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 32399-2400

Department of Health Welfare and Bio-Environmental Services 515 West 6th Street Jacksonville, Florida 32206-4397

Any person may send written comments on the proposed action to Mr. Bill Thomas 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.

SENDER: Complete items 1 and 2 when additional conti	one are desired, and appropriate items 2 and 4				
SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Feilure 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 celivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.					
1. Show to whom delivered, date, and addressee's address. 2. Restricted Delivery. 3. Article Addressed to: 4. Article Number					
Mr. J. Franklin Mixson	P 274 010 462				
Jefferson Smurfit Corporation	Type of Service:				
1915 Wigmore Street P.O. Box 150 Jacksonville, FL 32201	Registered Insured COD Express Mail				
5 demonville, 11 52201	Always obtain signature of addressee or agent and DATE DELIVERED.				
5. Signature – Addressee	8. Addressee's Address (ONLY if requested and fee paid)				
6. Signature/—Agent					
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7. Date of Delivery (-21-88)	е,				
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P 274 010 462

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL (See Reverse)

Sen to Franklin Mixson Jefferson Smurfit Cor Street and No. 1915 Wigmore Street P.O. State Pan Pair Box 150 Jacksonville, FL 3220 Postage S Cottled Foo						
1915 Wigmore Street						
P.O. State Pan Pzip BOX 150 Jacksonville, FL 32201						
Postage	S					
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						
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Mailed: 01/26/88 Permit: AC 16-1418	869					
	Jefferson Smurfit- Street and No. 1915 Wigmore Street P.O. State and ZIP 20 150 Jacksonville, FL. 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 Mailed: 01/26/88					

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

January 25, 1988

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. J. Franklin Mixson Jefferson Smurfit Corporation 1915 Wigmore Street P. O. Box 150 Jacksonville, Florida 32201

Dear Mr. Mixson:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for Jefferson Smurfit Corporation to construct a new batch digester system and associated noncondensible TRS gas handling system at the existing facility in Jacksonville, Duval County, Florida.

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/bm

Attachments

cc: K. Mehta, BESD

B. Williams, JSC

J. Cox, JSC

D. Buff, P.E., KBN

B. Pittman, Esq., DER

BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of Application for Permit by:

Jefferson Smurfit Corporation 1915 Wigmore Street P. O. Box 150 Jacksonville, Florida 32201

DER File No. AC 16-141869

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 stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Jefferson Smurfit Corporation, applied on November 12, 1987, to the Department of Environmental Regulation for a permit to construct a new batch digester system consisting of five 6200 cu. ft. digesters with an automated operation system, associated Blow Tank/Blow Heat Condensing System, and Turpentine Recovery System. An associated noncondensible gas handling system will be installed to collect and transport all of the new batch digester system's TRS emissions to the No. 3 Lime Kiln, where the gases will be incinerated. The maximum daily pulp production rate will be 1250 TPD ADP (tons per day of air dried pulp). The location of the project will be at Jefferson Smurfit's existing facility in Jacksonville, Duval 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 Department has determined that an air construction permit was needed for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit applications. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be provided to the Department within seven days of publication of the notice. 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 petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, 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 120.57, Florida Statutes. Petitions must comply with the requirement of Florida Administrative Code Rules 17-103.155 and 28-5.201 (copy enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. 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, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

Executed 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:

- K. Mehta, BESD
- B. Williams, JSC
- J. Cox, JSC
- D. Buff, P.E., KBN
- B. Pittman, Esq., DER

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 himse f entitled; and
 - (g) Such other information which the petitioner contends is material.

State of Florida Department of Environmental Regulation Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Jefferson Smurfit Corporation to construct a new batch digester system consisting of five 6200 cu. ft. digesters with an automated operation system, associated Blow Tank/Blow Heat Condensing System, and Turpentine Recovery System. An associated noncondensible gas handling system will be installed to collect and transport all of the new batch digester system's TRS emissions to the No. 3 Lime Kiln, where the gases will be incinerated. The maximum daily pulp production rate will be 1250 TPD ADP (tons per day of air dried pulp). The location of the project will be at Jefferson Smurfit's existing facility in Jacksonville, Duval County, Florida. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

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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 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 n > 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 32399-2400. 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 32399-2400

Department of Health Welfare and Bio-Environmental Services 515 West 6th Street Jacksonville, Florida 32206-4397

Any person may send written comments on the proposed action to Mr. Bill Thomas 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.

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 $\frac{1-26-88}{}$.

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.

fledy Proges

1-26-88 Date

Technical Evaluation and Preliminary Determination

Jefferson Smurfit Corporation
Duval County
Jacksonville, Florida

Permit Number: AC 16-141869

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

I. Application

A. Applicant

Jefferson Smurfit Corporation 1915 Wigmore Street P. O. Box 150 Jacksonville, Florida 32201

B. Project Description and Location

The applicant proposes to replace the existing digester system which consists of six (6) batch digesters and associated blow tank, accumulator and turpentine condenser, with five (5) new batch digesters, new blow tank, new accumulator tank and new turpentine condenser. A further description is offered:

o Five new 6200 cubic foot batch digesters will be installed and the six existing batch digesters will be retired from service. The new batch digesters will be equipped with automatic capping valves and all digester operations will be automated with a new distributed control system.

The equipment required for a cold blow heat recovery process will be installed. In this process most of the hot liquor in the digester at the end of the cook is displaced with cooler washer filtrate prior to blowing, resulting in a colder blowing temperature. The volume of blow gases flashed off is approximately 10% of a conventional blow heat system so the TRS containing gases are easier to collect. The hot liquor, which is displaced out of the digester, is used to preheat white liquor resulting in an energy savings.

A new blow tank and blow heat condensing system will be installed to replace the existing system, which is inefficient and vents considerable amounts of TRS containing blow gases to the atmosphere. The new blow heat condensing system will be sized to eliminate the TRS emissions. Non-condensible gases will be collected and incinerated in the existing No. 3 Lime Kiln. Pulp from the new blow tank will be pumped to existing screening and washing operations.

A new turpentine recovery system, consisting of a new gas-off separator and turpentine condensers, will be installed to replace existing equipment. Relief gases from the digester cooking operation will be condensed and transported to the existing turpentine decanter for turpentine recovery. Non-condensible gases will be collected and incinerated in the existing No. 3 Lime Kiln.

The proposed project will take place at the applicant's existing facility at 1915 Wigmore Street in Jacksonville, Duval County, Florida. The UTM coordinates are Zone 17, 439.8 km East and 3359.4 km North.

The Standard Industrial Codes are:

Major Group 26: Paper and Allied Products; Industry Group No. 262; Industry No. 2621: Paper Mills

The Standard Classification Codes are:

Pulp and Paper Industry:

Major Group 26: Sulfate (Kraft) Pulping

- o Digester Relief and Blow Tank 3-07-001-01 (tons ADUP)
- o Turpentine Condenser 3-07-001-07 (tons ADUP)
- o Accumulator 3-07-001-99 (tons ADUP)
- C. Process and Controls

The batch digester system pressure cooks wood chips (685,257 lbs/hr) with a white liquor (501,265 lbs/hr) to yield products of 178,167 lbs/hr air dried pulp (ADP), 234,608 lbs/hr black liquor solids (BLS), and 706 lbs/hr turpentine.

The gaseous pollutant emissions of total reduced sulfur (TRS) produced by the proposed new batch digester system, as defined by 40 CFR 60.282(d), will be collected and transported by a noncondensible gas (NCG) handling system to the No. 3 Lime Kiln, where they will be incinerated and oxidized to sulfur dioxide (SO₂).

The applicant assumes that the majority, if not all, of the SO₂ emissions will be removed in the No. 3 Lime Kiln, while processing lime mud, and by further treating the flue gas in the associated wet scrubber system.

Since the No. 3 Lime Kiln has already been tested for TRS and SO_2 emissions pursuant to AC 16-095614, a compliance test for TRS and SO_2 emissions will be required after connecting the NCG system to the No. 3 Lime Kiln to verify total destruction of the TRS gases and to establish the overall SO_2 removal efficiency of the No. 3 Lime Kiln and its associated wet scrubber system.

II. Rule Applicability

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (FAC) Rules 17-2 and 17-4.

The application package was deemed complete on January 11, 1988.

Duval County is designated unclassifiable for the pollutant SO₂ according to FAC Rule 17-2.430.

The existing mill is a major emitting facility in accordance with FAC Rule 17-2.100(111) for the pollutant SO₂.

The new batch digester system has the potential to emit TRS emissions and, after incineration in a combustion source, SO₂ emissions.

The applicant assumes that there will not be any TRS potential emissions from the new batch digester system, since the emissions will be incinerated in the No. 3 Lime Kiln. Therefore, destruction of the TRS emissions will have to be demonstrated to verify that there is not an increase in TRS emissions in the No. 3 Lime Kiln. Tests using EPA Methods 3 and 16 according to 40 CFR 60, Appendix A, shall be performed. Since a TRS emissions test was required for AC 16-095614, the results of the two tests are to be compared to validate the applicant's assumption and to rule out further review of the emissions pursuant to FAC Rule 17-2.500, PSD.

The applicant assumes that there will not be an increase in SO2 potential emissions, since the lime kiln, while processing lime mud, and its associated wet scrubber system are both excellent scrubbing mediums for SO2. Therefore, a compliance test for SO2 using EPA Method 6 according to 40 CFR 60, Appendix A, shall be required after connecting the new batch digester system's TRS NCG system to the No. 3 Lime Kiln and is operating

properly (40 CFR 60.8). Since a SO₂ emissions test was required for AC 16-095614, the results of the two tests are to be compared to establish the overall SO₂ removal efficiency of the No. 3 Lime Kiln and its associated wet scrubber system and to rule out further review of the emissions pursuant to FAC Rule 17-2.500, PSD.

Since the applicant proposes to increase the process raw materials and chemicals by the installation of a new batch digester system over the existing system, the following table will exhibit the projected uncontrolled annual emissions:

Table 1					
Source	Projected	Uncontrolled TRS	Emissions SO ₂	(TPY)	
New Batch Digester System		2395	4503		
Existing Batch Dige System	ester	1470	2764		
Net:		+925	+1739		

- Note: o TRS emissions are based on 10.5 lbs/ton ADP; new: 456,250 tons ADP; existing: 280,000 tons ADP (1987)
 - o SO₂ emissions are 1.88 times the TRS emissions
 - o 8760 hours per year operation assumed

Based on Table 3 in AC 16-095614, PSD tracking for SO₂ emissions are established at +9.6 TPY. Any net change in SO₂ emissions of +30.4 TPY will trigger new source review pursuant to FAC Rule 17-2.500(5). Therefore, if there is any increase in SO₂ emissions from the No. 3 Lime Kiln established by the post test, the emissions will have to be reviewed, with the total emissions separated into those associated with the increase in production and those that are associated with complying with the TRS rule. Based on Table 1, the net increase in uncontrolled SO₂ emissions is approximately 39% of the total projected. Consequently, the net change in SO₂ emissions, if any, between the pre and post tests, shall be prorated accordingly and further rule review pursuant to FAC Rule 17-2.500 shall be based on the results of the emissions assessment.

Since the applicant assumes and projects that there will be no increase in TRS potential emissions, the emissions are exempt from review pursuant to FAC Rule 17-2.500, PSD, and shall be subject to review pursuant to FAC Rule 17-2.520, Sources Not Subject to PSD or Nonattainment Review. Since the applicant assumes and projects that there will not be an increase in SO2 potential emissions and, if any, will be less than the amount necessary to require new source review (+30.4 TPY) pursuant to FAC Rule 17-2.500(5), the emissions are subject to review pursuant to FAC Rule 17-2.520. Therefore, the proposed new batch digester system will be considered a minor modification to an existing major facility not subject to review pursuant to FAC Rule 17-2.500, PSD, unless initial compliance tests for TRS and SO2 prove otherwise.

The new batch digester system is subject to FAC Rule 17-2.660, which includes the adoption of the Standards of Performance for Kraft Pulp Mills, 40 CFR 60, Subpart BB. The source is subject to the provisions of 40 CFR 60.280, 40 CFR 60.281, 40 CFR 60.283, 40 CFR 60.284, and 40 CFR 60.285.

The applicant selected to incinerate the new batch digester system's TRS emissions in accordance with 40 CFR 60.283(a)(1)(i). Therefore, the new batch digester system's TRS emissions are subject to the provisions of 40 CFR 60.283(1)(a)(5), which prohibits the No. 3 Lime Kiln from emitting any gases which contain TRS in excess of 8 ppm by volume on a dry basis, corrected to 10 percent oxygen (0.78 lb/hr and 3.39 TPY when liquid fossil is burned; 0.80 lb/hr and 3.49 TPY when gaseous fossil fuel is burned; see (AC 16-095614)).

Monitoring of emissions and operations shall be in accordance with 40 CFR 60.284 and FAC Rule 17-2.710(4).

Test methods and procedures shall be in accordance with 40 CFR 60.285. The initial compliance test shall be conducted in accordance with 40 CFR 60.8.

According to FAC Rule 17-2.960(1)(d)1.b., the proposed new batch digester system and the retirement of the existing system shall be in final compliance by May 12, 1989.

The source is subject to the provisions of FAC Rule 17-2.660(3), General Provisions.

The batch digester system and its control system are subject to the provisions of FAC Rule 17-2.600(4)(c)1.c.

Objectionable odors shall not be allowed off of the plant property pursuant to FAC Rule 17-2.620(2).

The appropriate processing fee pursuant to FAC Rule 17-4 will be established after tests are conducted for both TRS and SO₂ on the No. 3 Lime Kiln and the results are compared to test results for these pollutants conducted pursuant to AC 16-095614. Therefore, since a fee of \$100.00 (less than 25 TPY potential emissions) has been submitted, the appropriate processing fee will be based on the pre and post test result comparisons (worst case pollutant), less the \$100.00 already submitted.

III. Summary of Emissions and Air Quality Analysis

A. Emission Limitations

Pursuant to 40 CFR 60.283(1)(a)(i), there will not be any TRS emissions allowed, since the applicant elected to capture, transport, and incinerate all of the TRS emissions from the new proposed batch digester system. Consequently, the TRS allowable emission standard pursuant to 40 CFR 60.283(1)(a)(5) will not be changed as is established in AC 16-095614, unless warranted by pre and post test result comparisons. However, if there is a volumetric flow increase in the No. 3 Lime Kiln, thus increasing the TRS potential mass emissions, then an application along with the appropriate fee to modify the No. 3 Lime Kiln would be required.

The SO₂ emissions are projected to be less than the amount needed to achieve a net significant emission increase of 40 TPY. The actual SO₂ emission changes will be established by conducting a test after the new batch digester system's NCG system has been connected to the No. 3 Lime Kiln and the overall SO₂ removal efficiency will be established by comparing this test with the test performed pursuant to AC 16-095614. Therefore, the SO₂ allowable emission limit for the No. 3 Lime Kiln shall be the same as that established in AC 16-095614 (not to exceed 8.33 lbs/hr and 36.5 TPY).

The emission limiting standards/limits are consistent with the applicable requirements pursuant to FAC Rules 17-2 and 17-4 and 40 CFR 60, Subpart BB, which is adopted by reference according to FAC Rule 17-2.660(2).

B. Air Quality Analysis

From a technical review of the application package and supplementary material, an air quality analysis was not required at this time.

IV. Conclusions

Final review of the emissions of TRS and SO₂ pursuant to FAC Rule 17-2.500 has not been concluded, since emission tests will be required after connecting the TRS NCG system associated with the new batch digester system to the No. 3 Lime Kiln and is operating properly (40 CFR 60.8). The test results are to be compared to previous test results established pursuant to AC 16-095614. If there is no net significant pollutant increase associated with the increase in process through-put of raw materials and chemicals over the established present operating levels, no further review pursuant to FAC Rule 17-2.500 will be required.

Based on the test comparisons, the permit shall be amended to reflect any potential pollutant emission changes associated with PSD tracking pursuant to FAC Rule 17-2.500.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all applicable requirements of FAC Rules 17-2 and 17-4, and the Standards of Performance for Kraft Pulp Mills, 40 CFR 60, Subpart BB.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

PERMITTEE:
Jefferson Smurfit Corp.
1915 Wigmore Street
P. O. Box 150
Jacksonville, FL 32201

Permit Number: AC 16-141869 Expiration Date: August 10, 1989 County: Duval

Latitude/Longitude: 30° 22' 00"N/ 81° 37' 30" W

Project: Batch Digester System

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) $\overline{17-2}$ and $\overline{17-4}$. 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 construction of five 6200 cu. ft. digesters, associated Blow Tank/Blow Heat Condensing System and Turpentine Recovery System, and associated TRS noncondensible gas handling system. The maximum daily pulp production will be 1250 TPD ADP (tons per day of air dried pulp). The location of the project will be at Jefferson Smurfit Corporation's existing facility in Jacksonville, Duval County, Florida. The UTM coordinates are Zone 17, 439.8 km East and 3359.4 km North.

The Standard Industrial Codes are: Industry No. 2621-Paper Mills The Standard Classification Codes are: Pulp & Paper Industry Major Group 26: Sulfate (Kraft) Pulping

o Digester Relief & Blow Tank 3-07-001-01

o Turpentine Condenser 3-07-001-07

o Accumulator 3-07-001-99

Construction will be in accordance with the permit application, plans, documents, and reference material submitted unless otherwise stated in the General and Specific Conditions.

Attachments to be Incorporated:

- Mr. J. Franklin Mixson's cover letter and application package dated November 9, 1987, and received November 12, 1987.
- 2. Mr. J. E. Woosley's letter dated/received December 10, 1987.
- 3. Mr. C. H. Fancy's letter dated December 11, 1987.
- 4. Mr. J. Franklin Mixson's letter dated January 6, 1988, and received January 11, 1988.
- 5. Mr. J. Franklin Mixson's letter on a petition dated January January 18, 1988, and received January 19, 1988.
- 6. Mr. J. Franklin Mixson's letter of additional information dated January 18, 1988, and received January 19, 1988.
- 7. The Technical Evaluation and Preliminary Determination dated January 25, 1988.

PERMITTEE: Permit Number: AC 16-141869
Jefferson Smurfit Corp. Expiration Date: August 10, 1989

GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
 - 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

Permit Number: AC 16-141869 Expiration Date: August 10, 1989

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;
 - 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:

Permit Number: AC 16-141869 Jefferson Smurfit Corp. Expiration Date: August 10, 1989

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 noncompliance 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.
- 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
- The permittee shall comply with the following monitoring and record keeping requirements:
 - Upon request, the permittee shall furnish all records and plans required under Department rules. retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

Permit Number: AC 16-141869
Expiration Date: August 10, 1989

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. The project may operate continuously (i.e., 8760 hrs/yr).
- 2. The peak production rate shall not exceed 89.08 TPH ADP (tons per hour of air dried pulp; based on a utilization rate of 685,257 lbs/hr wood chips and 501,265 lbs/hr white liquor), 234,608 lbs/hr black liquor solids (dry), and 706 lbs/hr turpentine. The maximum daily production rate shall not exceed 1250 TPD ADP (tons per day of air dried pulp).

Permit Number: AC 16-141869
Expiration Date: August 10, 1989

SPECIFIC CONDITIONS:

- 3. The permittee shall not discharge from the batch digester system any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen unless the gases are combusted in the No. 3 lime kiln, from which the exhaust gases shall not contain TRS in excess of 8 ppm by volume on a dry basis, corrected to 10 percent oxygen (in accordance with 40 CFR 60.283(a)(1)(i)).
- 4. For inventory and PSD tracking purposes, the TRS potential emissions from the batch digester system will be considered zero (based on the permittee's control strategy and to be verified by conducting a verification test using EPA Methods 3 and 16 according to 40 CFR 60, Appendix A).
- 5. The batch digester system is subject to the requirements of Florida Administrative Code (FAC) Rule 17-2.660(3), General Provisions.
- 6. Operation reports and records shall be in accordance with 40 CFR 60 284(d), Monitoring of Emissions and Operations, and FAC Rule 17-2.710(4), Continuous Monitoring Requirements.
- 7. The initial and annual compliance tests shall be conducted in accordance with 40 CFR 60.285, Test Methods and Procedures. The initial compliance test shall be in accordance with 40 CFR 60.8.
- 8. All process equipment shall be inspected regularly and maintained in good operating condition to minimize fugitive gaseous emissions.
- 9. The project shall provide proof of compliance with FAC Rule 17-2.960(1)(d)1.b., by May 12, 1989, to the Duval County's Department of Health, Welfare and Bio-Environmental Services Division (BESD).
- 10. The expiration date of this permit coincides with the 90 days required to process a complete application for an operating permit after the final compliance date, in accordance with FAC Rule 17-4.
- 11. This project shall comply with all the applicable requirements of FAC Rules 17-2 and 17-4, and 40 CFR 60, Subpart BB, Standards of Performance for Kraft Pulp Mills.
- 12. The BESD's office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the BESD's office within 45 days of the test completion.

Permit Number: AC 16-141869 Expiration Date: August 10, 1989

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction and achieve final compliance on schedule, the BAQM's office and the BESD's office must be notified in writing 60 days prior to the final compliance date of the construction permit and the permittee shall submit appropriate information pursuant to FAC Rule 17-2.960(1)(e).

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the BESD's office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (Rules 17-2 and 17-4, FAC).

- If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application. (Rule 17-4, FAC)
- 13. Any change in the method of operation, raw materials, equipment or operating hours shall be submitted for approval to the BESD's office and the BAOM's office.
- 14. The existing batch digester system shall be in final compliance (retired from service and all related permits surrendered to the Department or BESD) by May 12, 1989.
- 15. The No. 3 Lime Kiln shall be tested for TRS and SO₂ emissions after the new batch digester system's TRS noncondensible gas handling system has been connected to it and the system is operating properly (40 CFR 60.8). The TRS emissions test, using EPA Methods 3 and 16 pursuant to 40 CFR 60, Appendix A, shall be used to verify complete destruction of the pollutant. The SO₂ emissions test, using EPA Method 6 pursuant to 40 CFR 60, Appendix A, shall be used to establish the overall removal efficiency of the No. 3 Lime Kiln and its associated wet scrubber system by comparing the test results with previously performed tests (initial compliance test: AC 16-095614). The results of the two tests and their comparisons to previous tests will be used to rule out or require further emissions review pursuant to FAC Rule 17-2.500 and to assess the appropriate processing fee pursuant to FAC Rule 17-4, of which \$100.00 (less than 25 TPY potential emissions) has already been received.

Permit Number: AC 16-141869 Expiration Date: August 10, 1989

- 16. The No. 3 Lime Kiln's permit, No. AC 16-095614, shall be amended to reflect the intent of this permit and to identify that it will be receiving TRS emissions from the new batch digester system. The permittee of AC 16-095614 shall request an amendment to the permit at least 90 days prior to the final compliance date of May 12, 1989.
- 17. The batch digester system and its control system are subject to the provisions of FAC Rule 17-2.600(4)(c)1.c.
- 18. Objectionable odors shall not be allowed off of the plant property pursuant to FAC Rule 17-2.620(2).

Issued this	day of,
STATE OF FLORIDA OF ENVIRONMENTAL	
Dale Twachtmann,	Secretary

SENDER: Complete items 1 and 2 when additional servi	ces are desired, and complete Items 3 and 4,	
Put your address in the "RETURN TO" space on the reverse card from being returned to you. The return receipt fee will delivered to and the date of delivery. For additional fees the postmaster for fees and check box(es) for additional service 1. Abow to whom delivered, date, and addressee's ad	provide you the name of the person following services are aveilable. Consult s) requested.	
3. Article Addressed to: Mr. J. Franklin Mixson, V.P.	4, Article Number P 274 010 447	
Jefferson Smurfit Corporation	Type of Service:	
1915 Wigmore Street	Registered Insured	
P.O. Box 150	COD Express Mail	
Jacksonville, FL 32201		
	Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature — Addressee	8. Addressee's Address (ONLY if	
X	requested and fee paid)	
6. Signature Agent		
x // Amother		
7. Date of Delivery	1	
2-5-88		
PS Form 3811, Feb. 1986	DOMESTIC RETURN RECEIPT	

P 274 010 447

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

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≠ U.S.G.P.O. 1985-480-794	Jefferson Smurfit Gorp. 1915 Wigmore Street					
P.O. 1	Jacksonville, FL 32201					
U.S.G	Postage	S				
4	Certified Fee	,				
2	Special Delivery Fee					
	Restricted Delivery Fee					
10	Return Receipt showing to whom and Date Delivered					
198	Return Receipt showing to whom, Date, and Address of Delivery					
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S Form 3800, June 1985	RE: Pre & Post Test to estb SO2 Control Efficiencies					
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File Coyy

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

January 22, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. J. Franklin Mixson, Vice President Jefferson Smurfit Corporation 1915 Wigmore Street P. O. Box 150 Jacksonville, Florida 32201

Dear Mr. Mixson:

Re: Pre and Post Test to Establish SO2 Control Efficiencies

It has become apparent in the review of the various permit applications received regarding the TRS NCG systems that the selected combustion devices and their associated control efficiencies for sulfur dioxide (SO2) are not established. Therefore, a pre and post test will be required to establish the SO2 removal efficiency of each combustion device (e.g. lime kiln), which is currently operating and in which TRS emissions are proposed to be incinerated.

It is advised that you perform the pre-test at your next earliest convenience (e.g. annual compliance test). Please submit the test data to the Department's Bureau of Air Quality Management to review and to document the results for the file.

If you have any questions, please call Bruce Mitchell at (904)488-1344 or write to me at the above address.

Sincerely,

C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality

Management

CHF/PR/s

S. Smallwood CC:

- J. Brown
- B. Thomas
- B. Pittman
- M. Zilberberg
- K. Mehta

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

January 22, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. J. Franklin Mixson, Vice President Jefferson Smurfit Corporation 1915 Wigmore Street P. O. Box 150 Jacksonville, Florida 32201

Dear Mr. Mixson:

Re: Pre and Post Test to Establish SO2 Control Efficiencies

It has become apparent in the review of the various permit applications received regarding the TRS NCG systems that the selected combustion devices and their associated control efficiencies for sulfur dioxide (SO₂) are not established. Therefore, a pre and post test will be required to establish the SO₂ removal efficiency of each combustion device (e.g. lime kiln), which is currently operating and in which TRS emissions are proposed to be incinerated.

It is advised that you perform the pre-test at your next earliest convenience (e.g. annual compliance test). Please submit the test data to the Department's Bureau of Air Quality Management to review and to document the results for the file.

If you have any questions, please call Bruce Mitchell at (904)488-1344 or write to me at the above address.

Sincerely,

C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality
Management

CHF/PR/s

cc: S. Smallwood

- J. Brown
- B. Thomas
- B. Pittman
- M. Zilberberg
- K. Mehta

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ALTON PACKAGING CORPORATION

A Wholly owned Subsidiary of Jefferson Smurth Corners Mill Division: Alton, Illinois 62002

DER

JAN 19 1988 pg

BAQM

CONTAINERBOARD MILL DIVISION 1915 WIGMORE STREET

P.O. BOX 150

JACKSONVILLE, FLORIDA 32201

TELEPHONE: (904) 353-3611

FACSIMILE TRANSMITTAL FORM

Date: JANUAR 1 18 1988

TO TERRY	XCE	FROM:	GENE	TONA	<u>) </u>
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If you experience difficulty with receipt, call (904)353-3611

(If different than From)

PLEASE DELIVER TO MR BRUCE MITCHELL

CAPS DER TUELDAY A.M. 1/19/88



JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 ALTON, ILLINOIS 62002-2276

618/463-6000

JAN 19 1988 Am

January 18, 1988

FEDERAL EXPRESS

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

P.O. BOX 150

JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

Mr. C. H. Fancy, P.E. Deputy Chief Bureau of Air Quality Management Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Completeness Review for Application to Construct New Digesting System Permit No. AC16-141869

Dear Mr. Fancy:

In addition to the response submitted to you by letter of January 6, 1988 regarding the subject permit, provided below is a response to question number 4 for the batch digester system of your letter of December 11, 1987.

4. No.

We trust that this response completes the application for this source. In order to expedite the permit review, if further information is required please contact Jerry Cox or Gene Tonn at 904/353-3611.

Very truly yours,

J. Franklin Mixson

V.P. and General Manager

Jacksonville Mill

JFM/nm1

cc: Khurshid Mehta, P.E. Jacksonville BESD

Bruce Mitchell-CAPS-DER

1-19-88

re for Siling.

Good! Rombo,

Brame



JEFFERSON SMURFIT CORPORATION

P.O. BOX 150 JACKSONVILLE, FLORIDA 32201

MR. BRUCE MITCHELL
CAPS - DEPARTMENT OF ENVIRONMENTAL REGULATION
TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

FEDERAL EXPRESS

Fed. Express



JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 ALTON, ILLINOIS 62002-2276 JAN 19 1988 RON

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BAQM

January 18, 1988

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JAN 15 | 1988

BAQM

Reply to: Containerboard Mill Division

1915 WIGMORE STREET P.O. BOX 150 JACKSONVILLE, FL 32201

JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

Mr. Dale Twachtmann, P.E. Secretary Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Subject: Motion for Additional Time to Petition for a Hearing on Permit

Application AC16-141869 for a Digester System.

Dear Secretary Twachtmann:

Jefferson Smurfit Corporation furnished additional information to the Department on the proposed digester system and has discussed the issues with Mr. Bruce Mitchell in the Central Air Permitting Section. Based on Mr. Mitchell's assurance that the additional information will complete the application as of January 19, 1988, Jefferson Smurfit Corporation withdraws its request for additional time to petition for a formal hearing on permit application AC16-141869.

The petition was filed on December 22, 1987 and was for three permit applications. Jefferson Smurfit Corporation withdraws only the Digester System from this request and wishes to maintain at this time its request on the other two sources, No. 9 Recovery Boiler AC16-141868 and Smelt Dissolving Tank AC16-141870.

We are confident that these two proposed project permit applications will be amicably resolved in a similar matter as with the digester system. If a resolution is reached with the Department, Jefferson Smurfit Corporation will withdraw its request on these two sources at that time.

Sincerely yours.

J. Franklin Mixson

V.P. and General Manager

Jacksonville Mill

JFM/nm1

cc: Dan Thompson-OGC-DER
Bruce Mitchell-CAPS-DER



MR. C. H. FANCY, P.E.
DEPUTY CHIEF
BUREAU OF AIR QUALITY MANAGEMENT
FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

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JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 ALTON, ILLINOIS 62002-2276

618/463-6000

January 6, 1988

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

P.O. BOX 150

JACKSONVILLE, FL 1220 TELEPHONE: 9044220-3611

JAN 11, 1988

BAOM

RE: Completeness Review for Application to Construct New Digesting System Permit No. AC16-141869

Dear Mr. Fancy:

The purpose of this letter is to respond to the request for additional information regarding the subject permit, as detailed in your letter of December 11, 1987. Provided below is the response to each question in your letter.

AC16-141869: Batch Digester System

- 1. Yes.
- 2. The only pollutant emitted from the existing batch digester system which is quantifiable is total reduced sulfur (TRS). TRS emissions from the existing system were quantified in the application for an interim operating permit already filed with the Florida Department of Environmental Regulation (FDER) and the Jacksonville Bio-Environmental Services Division (JBES). The interim application estimated TRS emissions from the batch digester system to be 10.5 lb/ton ADP, or 476 lb/hr based upon 1087 TPD ADP. Actual pulp production at JSC over the last year was approximately 280,000 tons ADP. Actual annual TRS emissions from the existing system are therefore calculated as:

 $280,000 \text{ tons/yr} \times 10.5 \text{ lb/ton} / 2,000 \text{ lb/ton} = 1470 \text{ tons/yr}$

TRS emissions from the proposed new batch digester system will be incinerated in the No. 3 Lime Kiln. The No. 3 Lime Kiln is an NSPS source, and allowable emissions will not increase from the kiln as a result of incinerating TRS gases from the new digester system in the kiln. Therefore, there will be a net decrease in TRS emissions due to the replacement of the existing digester system with the new system. The decrease is approximately 1,470 tons/yr of TRS.

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C. H. Fancy January 6, 1988 Page 2

3. All other air pollutant emitting sources at the JSC mill have operating permits which limit the operating rate and air emissions from those sources. These sources will continue to operate within the limits of their respective permits after the new digester system begins operating. If any specific source requires a permit modification due to the new digester system, an appropriate permit application will be submitted to the FDER. It is noted that "modification" as defined in FAC Rule 17-2,100(118) does not include an increase in the operating hours or in the production rate of a source unless such change would be prohibited under any enforceable permit condition which was established after January 6, 1975. As a result, increases or decreases in emissions due to such changes are not considered in determining if a facility-wide net increase in emissions has occurred. Only "major modification" are subject to the PSD and nonattainment new source review rules.

This is a source specific permit application for TRS. The FDER has refused to issue facility-wide permits for TRS sources, and has insisted upon source specific permits.

- 4. The new digesting system permit application is for an NSPS source and is not a request for a modification to an existing source. The new digesting system is replacing the existing system; therefore, the request for information in question 4 is not relevant.
- 5. As discussed in the response to Questions 2 and 3 above, there will be no facility-wide net increase in pollutant emissions resulting from the operation of the new batch digesting system.
- 6. Not Applicable.
- 7. The new digesting system will not have any SO_2 emissions; therefore, the request for additional fee is inappropriate.

Provided below is the response to the question concerning the digester system, which was submitted to you by letter of December 10, 1987, by the Bio-Environmental Services Division.

ANSWER:

The figures in A represent the wood chips and white liquor required to produce the peak rate of air dried tons of pulp per hour. The figures in B represent the wood chips and white liquor required to produce the maximum daily rate of air dried tons of pulp per hour.

C. H. Fancy January 6, 1988 Page 3

JSC requests that you expediously complete your review and issue the permit in order that construction of this project may begin.

We trust that this response completes the application for this source, in order to expedite this permit review, if any further clarification to this application is necessary please contact Jerry Cox or Gene Tonn at (904) 353-3611 as soon as possible.

JSC representatives will be available to meet with you at your convenience to expedite permit issuance.

Very truly yours,

Vice President - G.M.

JFM/nm1

cc: Khurshid Mehta, P.E. Jacksonville BESD

Copied: CHF187

Brue Mitchell

Pradup Raval

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1.12.88



JEFFERSON SMURFIT CORPORATION P.O. BOX 150 JACKSONVILLE, FLORIDA 32201



CARTIFIED - RETURN RECEIPT REQUESTED

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MAIL

MR. C. H. FANCY, P.E. DEPUTY CHIEF - BUREAU OF AIR QUALITY MANAGEMENT FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32399-2400

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JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 ALTON, ILLINOIS 62002-2276

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January 6, 1988

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

P.O. BOX 150

JACKSONVILLE, FL 3220 PTELEPHONE: 904A00-3611.

JAN 11

BAQM

RE: Completeness Review for Application to Construct New Digesting System Permit No. AC16-141869

Dear Mr. Fancy:

The purpose of this letter is to respond to the request for additional information regarding the subject permit, as detailed in your letter of December 11, 1987. Provided below is the response to each question in your letter.

AC16-141869: Batch Digester System

1. Yes.

2. The only pollutant emitted from the existing batch digester system which is quantifiable is total reduced sulfur (TRS). TRS emissions from the existing system were quantified in the application for an interim operating permit already filed with the Florida Department of Environmental Regulation (FDER) and the Jacksonville Bio-Environmental Services Division (JBES). The interim application estimated TRS emissions from the batch digester system to be 10.5 lb/ton ADP, or 476 lb/hr based upon 1087 TPD ADP. Actual pulp production at JSC over the last year was approximately 280,000 tons ADP. Actual annual TRS emissions from the existing system are therefore calculated as:

280,000 tons/yr x 10.5 lb/ton / 2,000 lb/ton = $\frac{2395}{1470}$ tons/yr

TRS emissions from the proposed new batch digester system will be incinerated in the No. 3 Lime Kiln. The No. 3 Lime Kiln is an NSPS source, and allowable emissions will not increase from the kiln as a result of incinerating TRS gases from the new digester system in the kiln. Therefore, there will be a net decrease in TRS emissions due to the replacement of the existing digester system with the new system. The decrease is approximately 1,470 tons/yr of TRS.

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C. H. Fancy January 6, 1988 Page 2

3. All other air pollutant emitting sources at the JSC mill have operating permits which limit the operating rate and air emissions from those sources. These sources will continue to operate within the limits of their respective permits after the new digester system begins operating. If any specific source requires a permit modification due to the new digester system, an appropriate permit application will be submitted to the FDER. It is noted that "modification" as defined in FAC Rule 17-2,100(118) does not include an increase in the operating hours or in the production rate of a source unless such change would be prohibited under any enforceable permit condition which was established due to such changes are not considered in determining if a facility-wide net increase in emissions has occurred only " net increase in emissions has occurred. Only "major modification" are PSD and nonattainment new source.

This is a source specific permit application for TRS. The FDER has refused to issue facility-wide permits for TRS sources, and has insisted upon source specific permits.

- 4. The new digesting system permit application is for an NSPS source and is not a request for a modification to an existing source. The new digesting system is replacing the existing system; therefore, the request for information in question 4 is not relevant.
- 5. As discussed in the response to Questions 2 and 3 above, there will be no facility-wide net increase in pollutant emissions resulting from the operation of the new batch digesting system.
- 6. Not Applicable.
- 7. The new digesting system will not have any SO2 emissions; therefore, the request for additional fee is inappropriate.

Provided below is the response to the question concerning the digester system, which was submitted to you by letter of December 10, 1987, by the Bio-Environmental Services Division.

ANSWER:

The figures in A represent the wood chips and white liquor required to produce the peak rate of air dried tons of pulp per hour. The figures in B represent the wood chips and white liquor required to produce the maximum daily rate of air dried tons of pulp per hour.

C1-13-84 COMM 2 80 () 12 P C. H. Fancy January 6, 1988 Page 3

JSC requests that you expediously complete your review and issue the permit in order that construction of this project may begin.

We trust that this response completes the application for this source, in order to expedite this permit review, if any further clarification to this application is necessary please contact Jerry Cox or Gene Tonn at (904) 353-3611 as soon as possible.

JSC representatives will be available to meet with you at your convenience to expedite permit issuance.

Very truly yours,

Vice President - G.M.

JFM/nm1

cc: Khurshid Mehta, P.E.
Jacksonville BESD

Copied: CHF1BT

Bruce Mitchell Product Rowal | 1.12.83
But oy Pitman



JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 ALTON, ILLINOIS 62002-2276

618/463-6000

8 Jon 1988

January 6, 1988

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. C. H. Fancy, P.E.

Deputy Chief

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

Reply to: Containerboard Mill Division

1915 WIGMORE STREET

P.O. BOX 150

JACKSONVILLE, FL 3220 TELEPHONE: 904/433-3611

JAN 11

BAQM

RE: Completeness Review for Application to Construct New Digesting System Permit No. AC16-141869

Dear Mr. Fancy:

The purpose of this letter is to respond to the request for additional information regarding the subject permit, as detailed in your letter of December 11, 1987. Provided below is the response to each question in your letter.

AC16-141869: Batch Digester System

1. Yes.

2. The only pollutant emitted from the existing batch digester system which is quantifiable is total reduced sulfur (TRS). TRS emissions from the existing system were quantified in the application for an interim operating permit already filed with the Florida Department of Environmental Regulation (FDER) and the Jacksonville Bio-Environmental Services Division (JBES). The interim application estimated TRS emissions from the batch digester system to be 10.5 lb/ton ADP, or 476 lb/hr based upon 1087 TPD ADP. Actual pulp production at JSC over the last year was approximately 280,000 tons ADP. Actual annual TRS emissions from the existing system are therefore calculated as:

280,000 tons/yr x 10.5 lb/ton / 2,000 lb/ton = 1470 tons/yr

TRS emissions from the proposed new batch digester system will be incinerated in the No. 3 Lime Kiln. The No. 3 Lime Kiln is an NSPS source, and allowable emissions will not increase from the kiln as a result of incinerating TRS gases from the new digester system in the kiln. Therefore, there will be a net <u>decrease</u> in TRS emissions due to the replacement of the existing digester system with the new system. The decrease is approximately 1,470 tons/yr of TRS.

C. H. Fancy January 6, 1988 Page 2

3. All other air pollutant emitting sources at the JSC mill have operating permits which limit the operating rate and air emissions from those sources. These sources will continue to operate within the limits of their respective permits after the new digester system begins operating. If any specific source requires a permit modification due to the new digester system, an appropriate permit application will be submitted to the FDER. It is noted that "modification" as defined in FAC Rule 17-2,100(118) does not include an increase in the operating hours or in the production rate of a source unless such change would be prohibited under any enforceable permit condition which was established after January 6, 1975. As a result, increases or decreases in emissions due to such changes are not considered in determining if a facility-wide net increase in emissions has occurred. Only "major modification" are subject to the PSD and nonattainment new source review rules.

This is a source specific permit application for TRS. The FDER has refused to issue facility-wide permits for TRS sources, and has insisted upon source specific permits.

The new digesting system permit application is for an NSPS source and is not a request for a modification to an existing source. The new digesting system is replacing the existing system; therefore, the request for information in question 4 is not relevant.

- 5. As discussed in the response to Questions 2 and 3 above, there will be no facility-wide net increase in pollutant emissions resulting from the operation of the new batch digesting system.
- Not Applicable.
- 7. The new digesting system will not have any SO_2 emissions; therefore, the request for additional fee is inappropriate.

Provided below is the response to the question concerning the digester system, which was submitted to you by letter of December 10, 1987, by the Bio-Environmental Services Division.

ANSWER:

The figures in A represent the wood chips and white liquor required to produce the peak rate of air dried tons of pulp per hour. The figures in B represent the wood chips and white liquor required to produce the maximum daily rate of air dried tons of pulp per hour.

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C. H. Fancy January 6, 1988 Page 3

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We trust that this response completes the application for this source, in order to expedite this permit review, if any further clarification to this application is necessary please contact Jerry Cox or Gene Tonn at (904) 353-3611 as soon as possible.

JSC representatives will be available to meet with you at your convenience to expedite permit issuance.

Very truly yours,

Vice President - G.M.

JFM/nm1

cc: Khurshid Mehta, P.E.
Jacksonville BESD

Copied: CHF1B7

Bruce Mitchell & 1.12.88
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Betsy Pitroan

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

December 11, 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. J. Franklin Mixson
V.P. and General Manager
-Jefferson Smurfit Corporation
1915 Wigmore Street
P. O. Box 150
Jacksonville, Florida 32201

Dear Mr. Mixson:

Re: Completeness Review for Application to Construct Permit Nos. AC 16-141868, -141869 and -141870

The Department received your cover letter dated November 9, 1987, and the above referenced application packages on November 12, 1987. Based on a review of these application packages, they are deemed incomplete. Therefore, submit the following information, including all reference material, calculations and assumptions, to the Department's Bureau of Air Quality Management (BAQM) office so their status can, again, be ascertained:

AC 16-141869: Batch Digester System

- 1. Is it the intent of Jefferson Smurfit Corporation (JSC) to request an increase in the total process input rate for the new batch digester system above the demonstrated (contemporaneous) rate for the existing batch digester system?
- 2. If the answer to No. 1 above is yes, please calculate and submit the net emission changes in the pollutants between the existing and proposed new batch digester systems. If the net emission change of any pollutant is greater than the net significant emission rate contained in Florida Administrative Code (FAC) Rule 17-2 Table 500-2, submit an amended application pursuant to FAC Rule 17-2.500(5), New Source Review for Prevention of Significant Deterioration (PSD).
- 3. Referencing No. 2 above, calculate and submit the total process input rate and associated pollutant emissions for all affected sources at the mill due to the proposed increase in total process input rate in the proposed new batch digester

Mr. J. Franklin Mixson Page Two December 11, 1987

system. If any of these sources are capable of accommodating a higher level of process input rate through federally enforceable permitted conditions, please document. If not, please submit an application with the appropriate fee for each affected source to the DER's BAQM office for a modification pursuant to FAC Rule 17-2.500, PSD, or FAC Rule 17-2.510, Nonattainment Area Review, depending on the affected pollutant.

- 4. Since September 24, 1976, has there been any physical change or change in the method of operation of the existing batch digester system? If so, please document and describe the nature of the change(s) and their associated cost(s).
- 5. Please submit an ambient air quality standards (AAQS) analysis and a PSD maximum concentration increase (increment) analysis for all pollutants which have a facility-wide PSD significant net emissions increase. These analyses should be sufficient to give the Department reasonable assurance that the net emissons increase will not cause or contribute to any AAQS or increments violation.
- 6. If the answer to No. 1 is no, please submit an amended permit application to reflect the maximum desired level of operational rates that you want reviewed. Also, calculate the potential pollutant emissions that will be emitted at this level.
- 7. Because the potential pollutant emissions for SO₂ is greater than 100 TPY, the appropriate fee is \$1000.00. Therefore, submit the deficient amount of \$900.00 to the Department.
- AC 16-141868 and -141870: No. 9 Recovery Boiler (RB) and Smelt Dissolving Tank (SDT)
- 1. Are the increased raw material and chemical through-put rates requested due to the rates requested for the proposed new batch digester system?
- 2. If JSC intends to permit the proposed new batch digester system at the mill's present level of operation and this would alter the raw material and chemical through-put rates for the No. 9 RB and SDT, then please amend each source's application and calculate the potential pollutant emissions at this level.
- 3. Will the requested levels of increased raw material and chemical through-put rates for the proposed new batch digester system require an increase in raw material and chemical through-put rates in the existing multiple effect

Mr. J. Franklin Mixson Page Three December 11, 1987

evaporator (MEE) system and its pollutant emissions (TRS/SO₂)? If so, please explain and submit the changes requested. If the MEE system requires a permit modification, please submit an application along with the appropriate fee to the DER's BAOM office.

- 4. Since September 24, 1976, has there been any physical change or change in the method of operation for these sources? If so, please document and describe the nature of the change(s) and their associated cost(s).
- 5. Has the No. 9 RB and/or SDT ever been tested at the proposed maximum raw material and chemical through-put rates? If so, please submit the test results.
- 6. In its existing state and without the proposed alterations, are the No. 9 RB and/or SDT capable of accommodating the proposed increased raw material and chemical through-put rates? If not, please explain.
- 7. Please address all of the concerns listed in the attached letter from the Duval County Bio-Environmental Services Division office. If there are any repetitive questions, please just provide the one answer and acknowledge the citing in your response.

If there are any questions, please call Bruce Mitchell, Pradeep Raval or Max Linn, at (904)488-1344, or write to me at the above address.

Sincerely,

C. H. Fancy, P.E.

Deputy Chief

Bureau_of_Air_Quality

Management

CHF/BM/s

Attachment

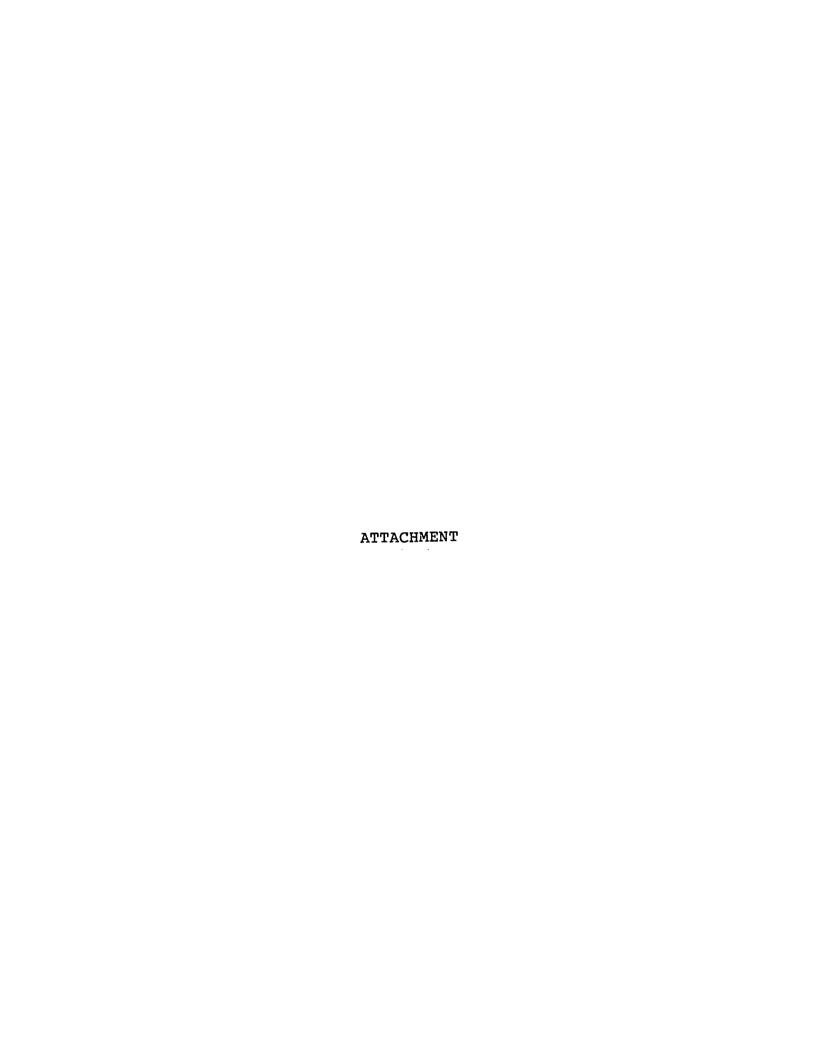
cc: K. Mehta, BESD

B. Pittman, Esq.

J._Cox, JSC.

B. Williams, JSC

D. Buff, P.E., KBN



DEPARTMENT OF HEALTH, WELFARE & BIO-ENVIRONMENTAL SERVICES

Bio-Environmental Services Division Air and Water Pollution Control

December 10, 1987



Mr. Claire Fancy, P.E.,
Department of Environmental Regulation
2600 Blair Stone Road
Twin Towers Office Bldg,
Tallahassee, Florida 32077

DER

DEC 1 0 1987

Re: Jefferson Smurfit Corporation

TRS Construction Permit Applications

BAQM

Dear Mr. Fancy:

Bio-Environmental Services Division (BESD) provides the following comments on the captioned permit applications:

Smelt Dissolving Tank

Section III A

Does the given smelt process weight (96,240 lbs/hr) correspond to the recovery boiler process weight (137,500 lbs/hr black liquor solids) or the previous recovery boiler process weight (120,000 lbs/hr black liquor solids)?

The applicable rule for the SDT particulate matter emissions is 17-2.650(2)(c)10., Florida Administrative Code (FAC). The same rule is applicable for visible emissions.

It is noted that the requested particulate matter emission rate is significantly lower than the rate which is derived using the equation found in the referenced rule. If Jefferson Smurfit Corporation (JSC) desires a lower particulate matter limit it must be understood that the limit cannot be increased at a later date without a modification permit. The potential emissions should be reported as uncontrolled emissions in accordance with the permit application procedures.

Recovery Boiler

Section III A

At what percent moisture are the black liquor solids fired? What is dry?...

Section III C

It is noted that the allowable particulate matter emission rate calculated using the correct standard (3-1bs/3000-1bs-black-liquor-solids-fired)—is-137.5-1bs/hr. based upon the requested operating rate. If JSC desires a lower particulate matter limit it must be understood that the limit cannot be increased at a later date without a modification permit. The potential emissions should be reported as uncontrolled emissions in accordance with the permit application procedures.



Section III E .

Are black liquor and fuel oil fired simultaneously at the given rates?

Digester System

Attachment B, Section I A and B

Do the figures in A represent the maximum hourly capacity and the figures in B the maximum hourly average based on maximum daily input? This item should be clearly explained.

General Comments

The construction permit applications definitely request higher operating capacities than are currently permitted. In accordance with the agreement reached in the November 4, 1987 meeting in Tallahassee (concerning the permit applications), testing for demonstrating highest existing capacity of a unit should be performed at a minimum of 96% of the maximum capacity. This testing is essential in establishing the actual capacities of the units. It is strongly urged that testing at these rates be done prior to issuance of any construction permit.

It is noted from the literature provided that the modifications proposed for the Recovery Boiler will allow increases in production capacity through increased efficiency and higher furnace operating rates. This literature further supports the need for establishing the maximum capacities of the units at this time.

In addition to the capacity increase the literature indicates a prime environmental benefit of a significant reduction in furnace generated TRS (below 3 ppm). This modification coupled with the recently installed molecular oxygen system on the black liquor oxidation system should allow JSC to consistently maintain TRS emissions at or below the 5 ppm level. In furtherance of a good faith effort by JSC and an opportunity to reduce allowable TRS emissions by an additional 70 tons per year it is requested that the JSC agree to the 5 ppm emission limit in the construction permit. The technology review presented in the permit application appears to make this option feasible.

If BESD may be of further assistance in this matter, please advise.

Very truly yours,

Jerry E. Woosley

Associate Pollution Control Engineer

JEW/ecr

Mr. Bill Stewart, P.E., DER-Mr. Gene Tonn, P.E., JSC BESD 1010 A

Disc 1, 46

PS Form 3811. July 1983 447-845	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. XX Show to whom, date and address of delivery. 2. Restricted Delivery.								
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<u>R</u>	3. Article Addressed to: J. Franklin Mixson								
ار									
	Vice President and General Manager								
	Jefferson Smurfit Corporation								
	1915 Wigmore Street								
	P.O. Box 150								
	Jacksonville, FL 32201								
	4. Type of Service: Article Number								
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RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL (See Reverse)

* U.S.G.P.O. 1985-480-794	ScJuo Franklin Mixson, V.P. —Jefferson-Smurfit-Corpora Sul 1915 Wigmore Street						
P.O. 1	Jacksonville, FL						
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PS Form 3800, June 1985	Mailed: 12/11/87 Permit: AC 16-14 -869	1868, 9, -870					

DEPARTMENT OF HEALTH, WELFARE & BIO-ENVIRONMENTAL SERVICES Bio-Environmental Services Division Air and Water Pollution Control

December 10, 1987



Mr. Claire Fancy, P.E.,
Department of Environmental Regulation
2600 Blair Stone Road
Twin Towers Office Bldg.
Tallahassee, Florida 32077

DER

DEC 1 0 1987

BAQM

Re: Jefferson Smurfit Corporation

TRS Construction Permit Applications

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Section III A

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Section III C

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Section III E

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Digester System

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If BESD may be of further assistance in this matter, please advise.

Very truly yours,

Jerry E. Woosley

Associate Pollution Control Engineer

JEW/ecr

cc: Mr. Bill Stewart, P.E., DER Mr. Gene Tonn, P.E., JSC BESD 1010 A

Disc 1, 46

Batch Blyester Sys Existly 8760 hrs.

153,750 lbs/hr wood chi;s

50% Hao

58,040 lbs/he bk + wht liquer

0.5 lbs: dry / 16 chips / 24 hrs/day = 153,746 120/Ar

white the 1,250 st3/cook x 1,087 ADT/Day x 62,4 lbs/st3 x 1.15 sp. gr. x

. Dis 1/65 colids/16 lig / 24 hrs/day x 10.5 ADT/cook = 58,038 lbs/hr

TRS: 163/AC (EPA 450/2-78-0036, Table 5-1)

i'. 1,087 ADT/On, x 10,5 lbs TRS/ADT + 24 hrs/don = 475.6 lbs TRS/ADT + 24 hrs/don = 475.6 lbs TRS/ADT TRS

wood chiliping

Bio-Environmental Services Khurshid Mehta / Gerry Woosley

1. Jefferson Smurfit

Recovery Bailer AC 16-141868

Dignolul System AC 16-141869

Small Dissolving Jank AC 16-141870

2. Siminale Krayt Corporation

no. I fime Kiln AC 16-141790 no. 2 Line Kiln AC 16- 141792 no. 3 hime kiln AC 16- 141793 no. 1 Dissalung Jank AC16-141794 no. 2 Dissalving. I and AC16-141795 nos. Discalring Jank AC 16- 141796 no. 1 & 2 Batch Bigeoter System AC 16- 14/798 No. 1 Fine Multi Expert Desporator AC16-141799 No. 2. home weeti - Effect Evaporator AC 16-141800 No. 3 hime Multi Eject Evaporator AC 16-141801

Engineurs: Bruce Mitchell and Pradup Raval Modeler: Max fine

Day 30 on all the above listed permits is December 11, 1987

CC: Bruce Mitchell
Product Rowal > 11/25/87
Nax Rinn
CHF/BT

Bio-Environmental Services Khurshid Mehta / Gerry Woosley

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND	ACTION !	NO
TRANSMITTAL SLIP	ACTION I	DUE DATE
1. TO: (NAME, OFFICE, LOCATION)	·!	Initial
Khurshid Mehta		Date
2.		Initial
Jerry Woodup		Date
3.		Initial
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4.		Initial
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FROM:	DATE	-18-
C. H. Janay	PHONE	(904)
C. F. Osman		3-1344



JEFFERSON SMURFIT CORPORATION

401 ALTON STREET, P.O. BOX 276 **ALTON, ILLINOIS 62002-2276**

618/463-6000

Receipt # 76196 1 V # 142146 \$ 100.00

AC 16-141869

Reply to: Containerboard Mill Division

1915 WIGMORE STREET P.O. BOX 150

JACKSONVILLE, FL 32201 TELEPHONE: 904/353-3611

November 9, 1987

Federal Express

Mr. Stephen Smallwood, P.E. Chief, Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32301-86317

Subject: Air Construction Permit Application

Total Reduced Sulfur Emission

Digester System

Jefferson Smurfit Corporation

Jacksonville Mill

Dear Mr. Smallwood:

Enclosed are four copies of an Air Construction Permit Application for the digester system at the Jefferson Smurfit Corporation mill in Jacksonville. Also enclosed is the \$100 permit application fee.

The project described in this construction permit is proposed in order to achieve compliance with the Department's TRS emission regulations as found in Chapter 17-2.600(4)(C) FAC. Enclosed with this application is an overview of the Company's overall TRS compliance program for the Jacksonville mill.

In order to meet the compliance date provided by the Department's rule, a timely consideration of this application will be extremely critical.

If you have any questions, please call Jerry Cox or Gene Tonn at 904/353-3611 or write to me at the above address.

Very truly yours,

J. Franklin Mixson Vice President and General Manager

Jacksonville Mill

JFM/mt

Enclosure

cc: Khurshid Mehta, P.E. Jacksonville BESD

TRS COMPLIANCE PLAN JEFFERSON SMURFIT CORPORATION JACKSONVILLE, FLORIDA NOVEMBER 1987

OVERALL TRS COMPLIANCE PROGRAM JEFFERSON SMURFIT CORPORATION JACKSONVILLE MILL

Jefferson Smurfit Corporation (JSC) of Jacksonville, Florida is proposing several changes at its existing pulp mill in order to achieve compliance with the Department of Environmental Regulation's total reduced sulfur (TRS) regulations as found in Chapter 17-2.600(4)(c)(FAC). The changes include replacement of existing equipment, addition of new equipment, and destruction of non-condensible TRS gases in an existing lime kiln. Specifically, the following changes are proposed:

- o Replacement of the existing digesting system, which consists of six (6) batch digesters and associated blow tank, accumulator and turpentine condenser, with five (5) new batch digesters, new blow tank, new accumulator tank and new turpentine condenser. Non-condensible TRS gases from these sources will be collected and incinerated in the existing No. 3 Lime Kiln.
- o Improvements to the combustion air distribution system and liquor firing and computer aided process control in the No. 9 Recovery Boiler to achieve continuous compliance with the 17.5 ppm TRS standard.
- o Replacement of the existing water spray/demister pad on the Smelt Dissolving Tank vent with a new wet scrubber. The new wet scrubber will be designed to achieve compliance with the TRS standard for smelt dissolving tanks.

Air Construction Permit applications have been prepared for each of these sources.

Other TRS sources at the JSC mill are already in compliance with Federal and/or State TRS rules. These include the Multiple Effect Evaporator system (TRS emissions incinerated in No. 3 Lime Kiln), Black Liquor Oxidation system (TRS emissions incinerated in No. 10 Power Boiler), Brown Stock Washer system (TRS emissions incinerated in No. 10 Power Boiler), and the No. 3 Lime Kiln. An air

construction permit application for the No. 3 Lime Kiln will be submitted at a later date to reflect the incineration of non-condensible TRS gases from the new digester system. The overall TRS control program proposed by JSC is shown in the attached flow diagram (Figure 1).

JSC has previously submitted a Conceptual TRS Compliance Plan to FDER. The conceptual plan set forth a schedule of events which must be met in order to ensure compliance by the final compliance dates specified in Chapter 17-2.600(4)(c) (FAC). This schedule includes dates by which JSC must provide FDER with certification of purchase orders for major pieces of equipment. However, before purchase orders can be executed, air construction permits must be obtained from FDER. This requires FDER to complete review of the permit applications and issue construction permits by certain dates. The latest dates by which construction permits can be received and still meet the schedule set forth in the conceptual compliance plan are presented in Table 1. This date is January 12, 1988, for all sources.

Other pertinent dates set forth in the Conceptual TRS Compliance Plan are also shown in Table 1. Proof of final compliance for all sources is required by May 12, 1989. In order to allow sufficient time after May 12, 1989, to prepare and have approved air operating permits for the sources, it is requested that construction permit expiration dates be set no earlier than May 12, 1990.

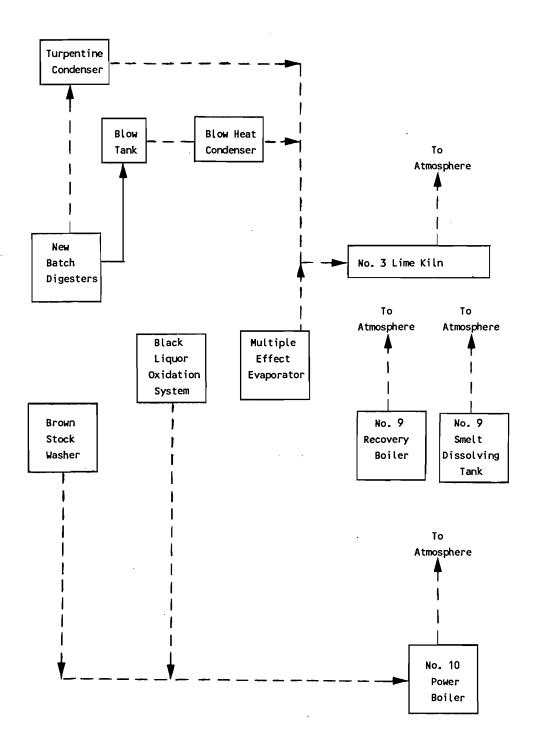


Figure 1. Overall TRS Compliance Program, Jefferson Smurfit Corporation

Table 1. Schedule for Achieving Compliance with TRS Regulations, JSC Jacksonville Mill

Source	Construction Permit Issued By	Certification of Equipment Order	Certification of Initial Construction	Completion of Construction	Proof of Final Compliance	Submit Operating Permit Application	Construction Permit Expiration Date
Digesting System	1/12/88	2/12/88	5/12/88	2/12/89	5/12/89	11/12/89	5/12/90
No. 9 Recovery Boiler	1/12/88	2/12/88	5/12/88	2/12/89	5/12/89	11/12/89	5/12/90
Smelt Dissolving Tank	1/12/88	2/12/88	5/12/88	2/12/89	5/12/89	11/12/89	5/12/90

STATE OF FLORIDA

ENVIRONMEN

Rump+#74196

1#142146

DEPARTMENT OF ENVIRONMENTAL REGULATION \$100.00

DER

AC 16-141869

NOV 12 1987

BAQM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Digester System	[X] New¹ [] Exis	stingl
APPLICATION TYPE: [X] Construction [] O	peration [] Modificat	ion
COMPANY NAME: Jefferson Smurfit Corporation	on	COUNTY: Duval
Identify the specific emission point sourc	e(s) addressed in this	application (i.e. Lime
Kiln No. 4 with Venturi Scrubber; Peaking	Unit No. 2, Gas Fired)	New Digesters 1-5
SOURCE LOCATION: Street 1915 Wigmore Stre	et	City Jacksonville
UTM: East Zone 7: 439.	,8 North	3359.4
Latitude 30 ° 22' 00	Longitu	ide <u>81 ° 37 ' 30 ''</u> W
APPLICANT NAME AND TITLE: J. Franklin Mixso	on, Vice President & Gen	eral Manager
APPLICANT ADDRESS: P.O. Box 150, Jacksonvil	lle, Florida 32201	
SECTION I: STATEMENT	S BY APPLICANT AND ENGI	NEER
A. APPLICANT		
I am the undersigned owner or authoriz	ed representative* of J	Tefferson Smurfit Corp.
I certify that the statements made in permit are true, correct and complete I agree to maintain and operate the facilities in such a manner as to constatutes, and all the rules and regula also understand that a permit, if granand I will promptly notify the departmentablishment.	to the best of my knowl pollution control sound mply with the provision tions of the department, ated by the department,	edge and belief. Further rce and pollution control of Chapter 403, Florida and revisions thereof. will be non-transferable
*Attach letter of authorization	Signed:	· /
	J. Franklin Mixson, Vi	ice President & General Please Type) Manager
	Date: 11/10/87 Telep	hone No. (904) 353-3611
R PROFESSIONAL ENGINEER RECISTERED IN FLO	OPIDA (where required h	v Chanter 471 FC

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 4/1, 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 David a. Buff
	_ David A. Buff
	Name (Please Type)
	KBN Engineering and Applied Sciences, Inc. Company Name (Please Type)
	P.O. Box 14288, Gainesville, Florida 32604 Mailing Address (Please Type)
Flo	rida Registration No. 19011 Date: 11/9/87 Telephone No. (904) 375-8000
	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.
	See Attachment A
В.	Schedule of project covered in this application (Construction Permit Application Only)
υ.	Start of Construction March 1988 Completion of Construction May 12, 1990
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.)
	\$8,000,000
D.	Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.
	Not Applicable
	•
	Form 17-1.202(1) ective October 31, 1982

	this is a new source or major modification, answer the following quest	ions.
1.	Is this source in a non-attainment area for a particular pollutant?	Yes
	a. If yes, has "offset" been applied?	No
	b. If yes, has "Lowest Achievable Emission Rate" been applied?	No
	c. If yes, list non-attainment pollutants. ozone, PM(TSP)	
2.	Does best available control technology (BACT) apply to this source? If yes, see Section VI.	No
3.	Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII.	No
4.	Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?	Yes
5.	Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this scurce?	No
	"Reasonably Available Control Technology" (RACT) requirements apply this source?	No
	a. If yes, for what pollutants?	,

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

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

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

	Contaminants		Utilization		
Description	Туре	% Wt	Rate - lbs/hr	Relate to Flow Diagram	
Wood Chips			685,257	1	
White Liquor		.* .	501,265	2	
<u> </u>					
	,				
•					

- B. Process Rate, if applicable: (See Section V, Item 1)
 - 1. Total Process Input Rate (lbs/hr): 1,186,522
 - 2. Product Weight (lbs/hr): 178,167 air dried pulp; 234,608 black liquor solids
- 706 lb/hr turpentine

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

Name of			Allowed ² Emission Rate per	Allowable ³ Emission	Potential ^{4K} Emission		Relate to Flow
Contaminant			Rule 17-2	lbs/hr	lbs/wr T/yr		Diagram
TRS, as H ₂ S*	.935	2,395	2.600(4)(c)1.	Incineration	935	2,395	3
2	1760	7,704.4					
		•					

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).

^{*} TRS will be incinerated in the No. 3 Lime Kiln.

D.	Control	Devices:	(See	Section	٧,	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)
Incineration in No. 3 Lime Kiln	TRS	+99%	NA	Incin. Design
No. 5 Line Rilli			· .	

E. Fuels Not Applicable

Fuel Analysis:

	Consum		
Type (Be Specific)	avg/hr max./hr		Maximum Heat Inpu (MM8TU/hr)
			· · · · · · · · · · · · · · · · · · ·
			· · · · · · · · · · · · · · · · · · ·
_			
		ļ	

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

Percent Sulfur:		Percent Ash:	
Density:	lbs/gal	Typical Percent Nitrogen:	
Heat Capacity:	BTU/1b	<u> </u>	BTU/ga
Other Fuel Contaminants (which may cau	se air p	ollution):	•
F. If applicable, indicate the percen	t of fue	l used for space heating.	

Annual Average Not Applicable Maximum

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

Not Applicable	 	
 · · · · · · · · · · · · · · · · · · ·	 	

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H. Emissi	on Stack Ge	ometry and	Flow Cha	racteri	stic	es (Pro	vide	data for e	ach stack):
Stack Heig	ht: Not A	pplicable		ft.	Sta	ack Dia	mete	r:	ft.
Gas Flow R	late:	ACFM		_DSCFM	Gas	Exit	Temp	erature:	• • • • • • • • • • • • • • • • • • •
Water Vapo	r Content:			. ~	V e l	locity:		· · · · · · · · · · · · · · · · · · ·	FPS
		SECT	ION IV:	INCINER Applica		RINFOR	MATI	GN .	
Type of Waste		Type I (Rubbish)	Type II (Refuse)	Type (Garba	III	(Patho	IV log- l)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Inciner- ated									
Uncon- trolled (lbs/hr)									
Total Weig Approximat		ted (lbs/h	r) Operation	per da	у	Design	Сар		hr)
		Volume (ft) ³	Heat R (BTU		T	уре	Fuel	BTU/hr	Temperature (°F)
Primary C	hamber					· 			··
Secondary	Chamber								
Stack Heig	ht:	ft. :	Stack Dia	mter: _				Stack T	emp
Gas Flow R	ate:		_ACFM	-		DSC	FM*	Velocity: _	FPS
	more tons p foot dry g						miss	ions rate i	n grains per stan-
Type of po	llution con	trol devic						ber [] Af	terburner ———————————————————————————————————

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	·									
	 									
ltimate sh, etc.		of any	effluent	other	than tha	t emitted	from the	stack	(scrubber	water

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

- 1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

 SEE ATTACHMENT B
- 2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

SEE ATTACHMENT C

- 3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
- SEE ATTACHMENT C

 4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
- SEE SECTION III.D.

 5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
- SEE SECTION III.D.

 6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
- SEE ATTACHMENT A

 7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent
 structures and roadways (Example: Copy of relevant portion of USGS topographic map).
- ATTACHED

 8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

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	•	
9.	The appropriate application fee in accormade payable to the Department of Environ	dance with Rule 17-4.05. The check should be nmental Regulation.
10.		e, attach a Certificate of Completion of Con- as constructed as shown in the construction
	SECTION VI: BEST AVAIL	ABLE CONTROL TECHNOLOGY
Α.	Are standards of performance for new sta applicable to the source?	able tionary sources pursuant to 40 C.F.R. Part 60
	[] Yes [] No	
	Contaminant	Rate or Concentration
		
8.	Has EPA declared the best available cont yes, attach copy)	erol technology for this class of sources (If
	[] Yes [] No	
	Contaminant	Rate or Concentration
		· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·	
		
с.	What emission levels do you propose as be	est available control technology?
	Contaminant	Rate or Concentration
	•	
	-	

- D. Describe the existing control and treatment technology (if any).
 - Control Device/System:

2. Operating Principles:

3. Efficiency:*

4. Capital Costs:

*Explain method of determining

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Best Available Copy

	5.	Useful Life:		6.	Operating Costs:	
	7.	Energy:		8.	Maintenance Cost:	
	9.	Emissions:				
		Contaminant			Rate or Concentration	
						.•
					·	
	10.	Stack Parameters				
	a.	Height:	ft.	b.	Diameter:	ft
	c.	Flow Rate:	ACFM	d.	Temperature:	٥٤
	е.	Velocity:	FPS			
Ε.		cribe the control and treatment additional pages if necessary).	techn	olog	y available (As many types as	applicabl
	1.					
	a.	Control Device:		ь.	Operating Principles:	
	с.	Efficiency: 1		d.	Capital Cost:	
	e.	Useful Life:		f.	Operating Coat:	
	g.	Energy: 2		h.	Maintenance Cost:	
	i.	Availability of construction mat	erial	ls an	d process chemicals:	
	j.	Applicability to manufacturing p	roces	3868:		
	k.	Ability to construct with contr within proposed levels:	ol de	vice	, install in available space,	and opera
	2.					
	a.	Control Device:		b.	Operating Principles:	
	c.	Efficiency: 1		d.	Capital Cost:	
	e.	Useful Life:		f.	Operating Cost:	
	g.	Energy: 2		h.	Maintenance Cost:	
	i.	Availability of construction mat	erial	s an	d process chemicals:	
l _{Ex} 2En	plai ergy	n method of determining efficienc to be reported in units of elect	y. rical	. pow	er - KWH design rate.	

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Applicability to manufacturing processes: Ability to construct with control device, install in available space, and operate within proposed levels: 3. Control Device: b. Operating Principles: c. Efficiency: 1 d. Capital Cost: Useful Life: Operating Coat: q. Energy: 2 h. Maintenance Cost: Availability of construction materials and process chemicals: . j. Applicability to manufacturing processes: Ability to construct with control device, install in available space, and operate within proposed levels: 4. Control Device: b. Operating Principles: а. Efficiency: 1 d. Capital Costs: c. e. Useful Life: f. Operating Cost: q. Energy: 2 h. Maintenance Cost: i. Availability of construction materials and process chemicals: j. Applicability to manufacturing processes: k. Ability to construct with control device, install in available space, and operate within proposed levels: F. Describe the control technology selected: 2. Efficiency: 1 1. Control Device: 3. Capital Cost: Useful Life: 6. Energy: 2 5. Operating Cost: 7. Maintenance Cost: 8. Manufacturer: 9. Other locations where employed on similar processes: a. (1) Company: (2) Mailing Address: (4) State: (3) City: lexplain method of determining efficiency. 2 Energy to be reported in units of electrical power - KWH design rate. DER Form 17-1.202(1)

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(5) Environmental Manager:	
(6) Telephone No.:	
(7) Emissions: 1	
Contaminant	Rate or Concentration
·	
(8) Process Rate: 1	
b. (1) Company:	
(2) Mailing Address:	
(3) City:	(4) State:
(5) Environmental Manager:	·
(6) Telephone No.:	
(7) Emissions: 1	
Contaminant	Rate or Concentration
	·
(8) Process Rate: 1	•
10. Reason for selection and description	of systems:
Applicant must provide this information whe available, applicant must state the reason(s	n available. Should this information not by why.
SECTION VII - PREVENTION O Not Applicable A. Company Monitored Data	F SIGNIFICANT DETERIORATION
•	() SO ² * Wind spd/dir
month d	y year month day year
Other data recorded	
Attach all data or statistical summaries	to this application.
*Specify bubbler (B) or continuous (C).	
DER Form 17-1.202(1)	11 65 12

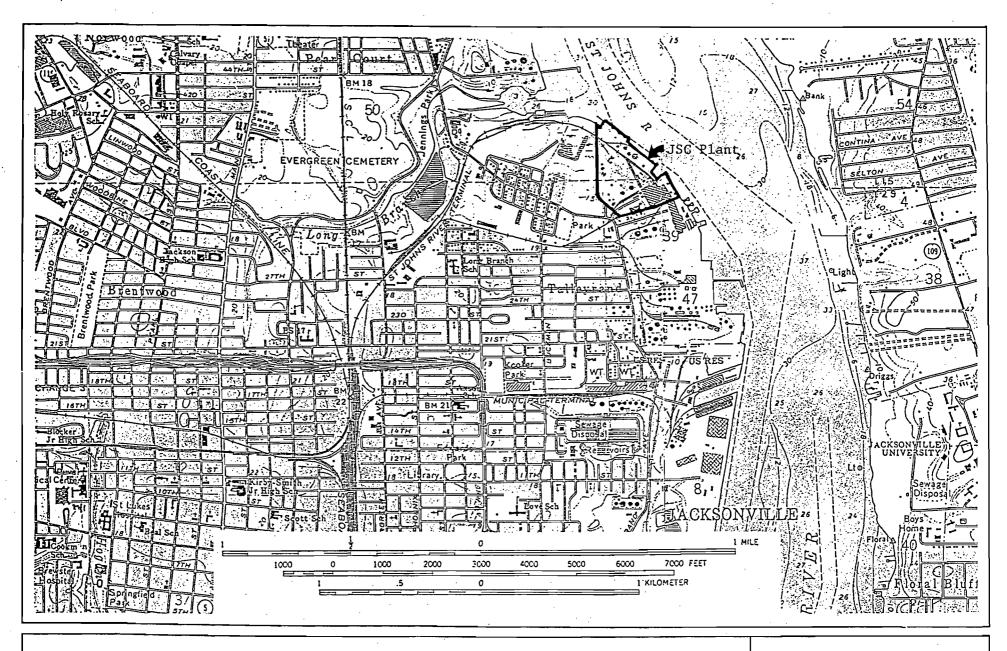
	a. Was instrum	entation EPA referenced or its equivalent? [] Yes [] No						
	b. Was instrum	entation calibrated in accordance with Department proc	edures?						
	[] Yes [] No [] Unknown							
В.	Meteorological (Data Used for Air Quality Modeling							
`	1Year(s) of data from // / to // month day year							
	2. Surface data	a obtained from (location)							
	3. Upper air (mixing height) data obtained from (location)							
	4. Stability w	ind rose (STAR) data obtained from (location)							
c	Computer Models Used								
	1.	Modified? If yes, at	tach description.						
	2.	Modified? If yes, at	tach description.						
	3.	Modified? If yes, at	tach description.						
	4.	Modified? If yes, at	tach description.						
	Attach copies of ciple output tab	f all final model runs showing input data, receptor lobles.	cations, and prin-						
D.	Applicants Maxim	num Allowable Emission Data							
	Pollutant	Emission Rate							
	TSP _	grams/sec							
	502	grams/sec							
٤.	Emission Data Us	sed in Modeling							

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

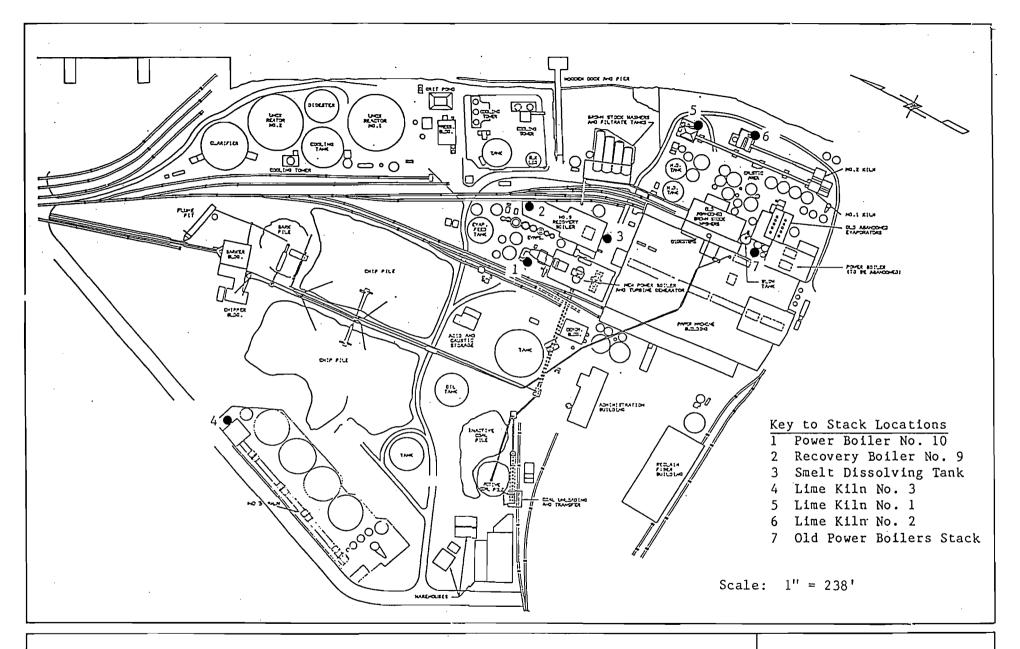
Instrumentation, Field and Laboratory

- G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.
- H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.



Site Location Map of Jefferson Smurfit Corporation





Plot Plan of Jefferson Smurfit Facility and Stack Locations



ATTACHMENT A

PROCESS DESCRIPTION

JSC currently operates a batch digesting system at its Jacksonville plant. JSC plans to replace the existing batch digesting system with a new batch digesting system. The proposed changes, which are summarized below, will result in compliance with the State of Florida TRS regulations.

* New Batch Digesters--Five new 6200 cubic foot digesters will be installed and the existing digesters will be taken out of service.

The new digesters will be equipped with automatic capping valves and all digester operations will be automated with a new distributed control system.

The equipment required for a cold blow heat recovery process will be installed. In this process most of the hot liquor in the digester at the end of the cook is displaced with cooler washer filtrate prior to blowing, resulting in a colder blowing temperature. The volume of blow gases flashed off is approximately 10% of a conventional blow heat system so the TRS containing gases are easier to collect. The hot liquor which is displaced out of the digester is used to preheat white liquor resulting in an energy savings.

- * New Blow Tank/Blow Heat Condensing--A new blow tank and blow heat condensing system will be installed to replace the existing system which is inefficient and vents considerable amounts of TRS containing blow gases to the atmosphere. The new blow heat condensing system will be sized to eliminate this TRS emissions source. Non-condensible gases will be collected and incinerated in the existing No. 3 Lime Kiln. Pulp from the new blow tank will be pumped to existing screening and washing operations.
- * New Turpentine Recovery--A new gas-off separator and turpentine condensers will be installed to replace existing equipment. Relief

gases from the digester cooking operation will be condensed and transported to the existing turpentine decanter for turpentine recovery. Non-condensible gases will be collected and incinerated in the existing No. 3 Lime Kiln.

A flow diagram of the new system is shown in Figure A-1.

The new batch digesting system will be required to meet the provisions of the federal New Source Performance Standards (NSPS), Subpart BB, Standards of Performance for Kraft Pulp Mills. The NSPS will apply to the following sources associated with the new digesting system at the JSC mill:

- o Batch digesters
- o Blow tank
- o Turpentine condensers

These sources are required to meet a TRS emission limit of 5 ppm by volume, dry basis, corrected to $10 \% \ O_2$, unless the TRS gases are incinerated in a lime kiln. JSC will incinerate the TRS gases in the No. 3 Lime Kiln, which is a NSPS source and is subject to the NSPS for TRS from lime kilns. Therefore, the 5 ppm NSPS for digester systems is not applicable to the new digesting system. FAC Rule 17 - 2.600(4)(c)1. does not require a more stringent limit on the new digesting system or the No. 3 Lime Kiln than that imposed by the NSPS.

The Florida TRS rules require that a contingency plan be developed for times when emergency venting of TRS emissions occurs, or when a TRS control device is shut down for essential maintenance [FAC Rule 17-2.600(4)(c)1.c.]. JSC will submit the required contingency plan in conjunction with the application for an operating permit for this source.

Tank

Turpentine to Exist. Decanter

Figure A-1. Flow Diagram of JSC Proposed Batch Digester System

Pulp to Existing Washers

ATTACHMENT B

DERIVATION OF PROCESS RATES

I. <u>DIGESTER INPUT RATES</u>

Maximum daily pulp production = 1250 TPD air dried pulp (ADP) = 52.08 TPH (avg) ADP

Peak production rate necessary to calculate peak flow rates and volumes = 89.08 TPH ADP

A. MAXIMUM HOURLY INPUT RATES

Wood chips = 685,257 lb/hr (wet @ 50% moisture)

White liquor = 501,265 lb/hr

Total input = 685,257 + 501,265 = 1,186,522 lb/hr

B. MAXIMUM DAILY INPUT RATE

Wood chips = 400,641 lb/hr (wet @ 50% moisture)

White liquor = 293,069 lb/hr

Total input = 400,641 + 293,069 = 693,710 lb/hr

II. <u>DIGESTER PRODUCT RATES</u>

A. MAXIMUM HOURLY PRODUCT RATE

1. Pulp Production

Yield factor = 0.52

685,257 lb/hr wood chips @ 50% moisture = 342,629 lb/hr (dry)

 $342,629 \text{ lb/hr wood chips (dry)} \times 0.52 = 178,167 \text{ lb/hr pulp}$

= 89.08 TPH pulp _{2/3} TPD

2. Black Liquor

1,599,239 lb/hr BL @ 14.67 % solids = 234,608 lb/hr BLS

B. MAXIMUM DAILY PRODUCT RATE

- 2. Black Liquor
 935,009 lb/hr BL @ 14.67% solids = 137,166 lb/hr BLS

III. TURPENTINE CONDENSERS

Turpentine production is estimated at 1.1 gal/ton of pulp Maximum production rate = 89.08 TPH pulp x 1.1 gal/ton = 98 gal/hr

98 gal/hr x 7.2 lb/gal = 706 lb/hr

ATTACHMENT C

EMISSION ESTIMATES

The cold blow digester system proposed by JSC will generate a much lower volume of non-condensible TRS gases than a conventional hot blow system. The volume of gases is on the order of 10% of the volume produced by a conventional hot blow. Although the volume of gases from the cold blow system will be low, little information is available related to the concentration of TRS in the non-condensible gases. However, it is expected that the cold blow system will produce less TRS than a conventional hot blow system. As a result, TRS emissions based upon a hot blow system are presented as an estimate of the maximum TRS expected from the cold blow system.

The USEPA publication entitled "Kraft Pulping: Control of TRS Emissions from Existing Mills" (EPA-450/2-78-003b) was used as the basis for estimating TRS emissions. The publication presents a maximum TRS emission rate from digesting systems of 10.5 lb/ton ADP.

Maximum hourly TRS = 89.08 TPH x 10.5 lb/ton = 935 lb/hr x 4เงิระ 40รรเงิ

Maximum annual TRS = 1,250 TPD x 10.5 lb/ton x 365 days/yr / 2,000 lb/ton = 2,395 TPY

REFERENCES

EPA-450/2-78-003b OAQPS No. 1.2-091

Kraft Pulping Control of TRS Emissions from Existing Mills

Emission Standards and Engineering Division

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air, Noise, and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

⁽¹⁾Percentage based on mills controlled by existing state regulations, plus information collected during previous surveys.

or operator may use any of the following procedures during a performance test:

- (1) Base compliance on control of the combined emissions:
- (2) Utilize a method acceptable to the Administrator that compensates for the emissions from the facilities not subject to the provisions of this subpart, or:
- (3) Any combination of the criteria of paragraphs (h)(1) and (h)(2) of this section.
- (i) Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart, determinations of compliance with § 60.272a(a)(3) will only be based upon emissions originating from the affected facility(ies).
- (j) Unless the presence of inclement weather makes concurrent testing infeasible, the owner or operator shall conduct concurrently the performance tests required under § 60.8 to demonstrate compliance with § 60.272a(a) (1), (2), and (3) of this subpart.

§ 60.276a Recordkeeping and reporting requirements.

- (a) Records of the measurements required in \$60,274a must be retained for at least 2 years following the date of the measurement.
- (b) Each owner or operator shall submit a written report of exceedances of the control device opacity to the Administrator semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.
- (c) Operation at a furnace static pressure that exceeds the value established under § 60.274a(g) and either operation of control system fan motor amperes at values exceeding ±15 percent of the value established under § 60.274a(c) or operation at flow rates lower than those established under § 60.274a(c) may be considered by the Administrator to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the Administrator semiannually.
- (d) The requirements of this section remain in force until and unless EPA.

in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.

(e) When the owner or operator of an EAF or AOD is required to demonstrate compliance with the standard under $\S 60.275a$ (h)(2) or (h)(3), the owner or operator shall obtain approval from the Administrator of the procedure(s) that will be used to determine compliance. Notification of the procedure(s) to be used must be postmarked 30 days prior to the performance test.

(Approved by the Office of Management and Budget under control number 2060-

Subpart BB—Standards of Performance for Kraft Pulp Mills

§ 60.280 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to the following affected facilities in kraft pulp mills: Digester system, brown stock washer system, multiple-effect evaporator system, recovery furnace, smelt dissolving tank, lime kiln, and condensate stripper system. In pulp mills where kraft pulping is combined with neutral sulfite semichemical pulping, the provisions of this subpart are applicable when any portion of the material charged to an affected facility is produced by the kraft pulping operation.
- (b) Except as noted § 60.283(a)(1)(iv), any facility under paragraph (a) of this section that commences construction or modification after September 24, 1976, is subject to the requirements of this subpart.

[51 FR 18544, May 20, 1986]

§ 60.281 Definitions.

As used in this subpart, all terms not defined herein shall have the same meaning given them in the Act and in Subpart A.

(a) "Kraft pulp mill" means any stationary source which produces pulp from wood by cooking (digesting) wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at high temperature and pressure. Regeneration of the cooking chemicals through a recovery process is also considered part of the kraft pulp mill.

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- (b) "Neutral sulfite semichemical pulping operation" means any operation in which pulp is produced from wood by cooking (digesting) wood chips in a solution of sodium sulfite and sodium bicarbonate, followed by mechanical defibrating (grinding).
- (c) "Total reduced sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping operation and measured by Reference Method 16.
- (d) "Digester system" means each continuous digester or each batch digester used for the cooking of wood in white liquor, and associated flash tank(s), below tank(s), chip steamer(s), and condenser(s).
- (e) "Brown stock washer system" means brown stock washers and associated knotters, vacuum pumps, and filtrate tanks used to wash the pulp following the digestion system. Diffusion washers are excluded from this definition.
- (f) "Multiple-effect evaporator system" means the multiple-effect evaporators and associated condenser(s) and hotwell(s) used to concentrate the spent cooking liquid that is separated from the pulp (black
- (g) "Black liquor oxidation system" means the vessels used to oxidize, with air or oxygen, the black liquor, and associated storage tank(s).
- (h) "Recovery furnace" means either a straight kraft recovery furnace or a cross recovery furnace, and includes the direct-contact evaporator for a direct-contact furnace.
- (i) "Straight kraft recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium and sulfur compounds by burning black liquor which on a quarterly basis contains 7 weight percent

- or less of the total pulp solids from the neutral sulfite semichemical process or has green liquor sulfidity of 28 percent or less.
- (j) "Cross recovery furnace" means a furnace used to recover chemicals consisting primarily of sodium and sulfur compounds by burning black liquor which on a quarterly basis contains more than 7 weight percent of the total pulp solids from the neutral sulfite semichemical process and has a green liquor sulfidity of more than 28 percent.
- (k) "Black liquor solids" means the dry weight of the solids which enter the recovery furnace in the black liquor.
- (l) "Green liquor sulfidity" means the sulfidity of the liquor which leaves the smelt dissolving tank.
- (m) "Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the recovery furnace.
- (n) "Lime kiln" means a unit used to calcine lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide.
- (o) "Condensate stripper system" means a column, and associated condensers, used to strip, with air or steam, TRS compounds from condensate streams from various processes within a kraft pulp mill.

[43 FR 7572, Feb. 23, 1978, as amended at 51 FR 18544, May 20, 19861

§ 60.282 Standard for particulate matter.

- (a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:
- (1) From any recovery furnace any gases which:
- (i) Contain particulate matter in excess of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen.
- (ii) Exhibit 35 percent opacity or
- (2) From any smelt dissolving tank any gases which contain particulate matter in excess of 0.1 g/kg black liquor solids (dry weight)[0.2 lb/ton black liquor solids (dry weight)].

(3) From any lime kiln any gases which contain particulate matter in excess of:

(i) 0.15 g/dscm (0.067 gr/dscf) corrected to 10 percent oxygen, when gaseous fossil fuel is burned.

(ii) 0.30 g/dscm (0.13 gr/dscf) corrected to 10 percent oxygen, when liquid fossil fuel is burned.

[43 FR 7572, Feb. 23, 1978]

§ 60.283 Standard for total reduced sulfur (TRS).

(a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:

(1) From any digester system, brown stock washer system, multiple-effect evaporator system, or condensate stripper system any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the following conditions are met:

(i) The gases are combusted in a lime kiln subject to the provisions of paragraph (a)(5) of this section; or

(ii) The gases are combusted in a recovery furnace subject to the provisions of paragraphs (a)(2) or (a)(3) of this section: or

(iii) The gases are combusted with other waste gases in an incinerator or other device, or combusted in a lime kiln or recovery furnace not subject to the provisions of this subpart, and are subjected to a minimum temperature of 1200° F. for at least 0.5 second; or

(Iv) It has been demonstrated to the Administrator's satisfaction by the owner or operator that incinerating the exhaust gases from a new, modifled, or reconstructed brown stock washer system is technologically or economically unfeasible. Any exempt system will become subject to the provisions of this subpart if the facility is changed so that the gases can be incinerated.

(v) The gases from the digester system, brown stock washer system, or condensate stripper system are controlled by a means other than combustion. In this case, this system shall not discharge any gases to the atmosphere which contain TRS in excess of 5 ppm

by volume on a dry basis, corrected to the actual oxygen content of the untreated gas stream.

(vi) The uncontrolled exhaust gases from a new, modified, or reconstructed digester system contain TRS less than 0.005 g/kg ADP (0.01 lb/ton ADP).

(2) From any straight kraft recovery furnace any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 8 percent oxygen.

(3) From any cross recovery furnace any gases which contain TRS in excess of 25 ppm by volume on a dry basis, corrected to 8 percent oxygen.

(4) From any smelt dissolving tank any gases which contain TRS in excess of 0.016 g/kg black liquor solids as H₂S (0.033 lb/ton black liquor solids as H₂S).

(5) From any lime kiln any gases which contain TRS in excess of 8 ppm by volume on a dry basis, corrected to 10 percent oxygen.

[43 FR 7572, Feb. 23, 1978, as amended at 50 FR 6317, Feb. 14, 1985; 51 FR 18544, May 20, 1986]

§ 60.284 Monitoring of emissions and operations.

(a) Any owner or operator subject to the provisions of this subpart shall install, calibrate, maintain, and operate the following continuous monitoring systems:

(1) A continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from any recovery furnace. The span of this system shall be set at 70 percent opacity.

(2) Continuous monitoring systems to monitor and record the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere from any lime kiln, recovery furnace, digester system, brown stock washer system, multiple-effect evaporator system, or condensate stripper system, except where the provisions of § 60.283(a)(1) (iii) or (iv) apply. These systems shall be located downstream of the control device(s) and the spans of these continuous monitoring system(s) shall be set:

ppm for the TRS contentration of 30 ppm for the TRS continuous monitoring system, except that for any cross recovery furnace the span shall be set at 50 ppm.

(ii) At 20 percent oxygen for the continuous oxygen monitoring system.

(b) Any owner or operator subject to the provisions of this subpart shall install, calibrate, maintain, and operate the following continuous monitoring devices:

(1) For any incinerator, a monitoring device which measures and records the combustion temperature at the point of incineration of effluent gases which are emitted from any digester system, brown stock washer system, multiple-effect evaporator system, black liquor oxidation system, or condensate stripper system where the provisions of § 60.283(a)(1)(iii) apply. The monitoring device is to be certified by the manufacturer to be accurate within ±1 percent of the temperature being measured.

(2) For any lime kiln or smelt dissolving tank using a scrubber emission control device:

(i) A monitoring device for the continuous measurement of the pressure loss of the gas stream through the control equipment. The monitoring device is to be certified by the manufacturer to be accurate to within a gage pressure of ±500 pascals (ca. ±2 inches water gage pressure).

(ii) A monitoring device for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±15 percent of design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. The Administrator may be consulted for approval of alternative locations.

(c) Any owner or operator subject to the provisions of this subpart shall, except where the provisions of § 60.283 (a)(1)(iv) or (a)(4) apply.

(1) Calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.

(2) Calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day for the recovery furnace and lime kiln. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under paragraph (c)(1) of this section and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.

(3) Correct all 12-hour average TRS concentrations to 10 volume percent oxygen, except that all 12-hour average TRS concentration from a recovery furnace shall be corrected to 8 volume percent using the following equation:

$$C_{corr} = C_{meas} \times (21 - X/21 - Y)$$

where:

C_{corr} = the concentration corrected for oxygen.

C_{meas} = the concentration uncorrected for oxygen.

X=the volumetric oxygen concentration in percentage to be corrected to (8 percent for recovery furnaces and 10 percent for lime kilns, incinerators, or other devices).

Y=the measured 12-hour average volumetric oxygen concentration.

(4) Record once per shift measurements obtained from the continuous monitoring devices installed under paragraph (b)(2) of this section.

(d) For the purpose of reports required under § 60.7(c), any owner or operator subject to the provisions of this subpart shall report semiannually periods of excess emissions as follows:

(1) For emissions from any recovery furnace periods of excess emissions are:

(i) All 12-hour averages of TRS concentrations above 5 ppm by volume for straight kraft recovery furnaces and above 25 ppm by volume for cross recovery furnaces.

(ii) All 6-minute average opacities that exceed 35 percent.

(2) For emissions from any lime kiln, periods of excess emissions are all 12hour average TRS concentration above 8 ppm by volume.

(3) For emissions from any digester system, brown stock washer system, multiple-effect evaporator system, or condensate stripper system periods of excess emissions are:

(i) All 12-hour average TRS concentrations above 5 ppm by volume unless the provisions of $\S 60.283(a)(1)$ (i), (ii), or (iv) apply; or

(ii) All periods in excess of 5 minutes and their duration during which the combustion temperature at the point of incineration is less than 1200 'F. where the provisions § 60.283(a)(1)(iii) apply.

(e) The Administrator will not consider periods of excess emissions reported under paragraph (d) of this section to be indicative of a violation of § 60.11(d) provided that:

(1) The percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions occur does not exceed:

(i) One percent for TRS emissions from recovery furnaces.

(ii) Six percent for average opacities from recovery furnaces.

(2) The Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

(Approved by the Office of Management and Budget under control no. 2060-0021)

[43 FR 7572, Feb. 23, 1978, as amended at 51 FR 18545, May 20, 19861

§ 60.285 Test methods and procedures.

(a) Reference methods in Appendix A of this part, except as provided under § 60.8(b), shall be used to determine compliance with § 60.282(a) as follows:

(1) Method 5 for the concentration of particulate matter and the associated moisture content,

(2) Method 1 for sample and velocity traverses,

(3) When determining compliance with § 60.282(a)(2), Method 2 for velocity and volumetric flow rate,

(4) Method 3 for gas analysis, and

(5) Method 9 for visible emissions.

(b) For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.85 dscm/hr (0.53 dscf/min) except that shorter sampling times. when necessitated by process variables or other factors, may be approved by the Administrator. Water shall be used as the cleanup solvent instead of acetone in the sample recovery procedure outlined in Method 5.

(c) Method 17 (in-stack filtration) may be used as an alternate method for Method 5 for determining compliance with § 60.282(a)(1)(i): Provided, That a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17 and the stack temperature is no greater than 205° C (ca. 400° F). Water shall be used as the cleanup solvent instead of acetone in the sample recovery procedure outlined in Method 17.

(d) For the purpose of determining compliance with § 60.283(a) (1), (2), (3), (4), and (5), the following reference methods shall be used:

(1) Method 16 or, at the discretion of the owner or operator, Method 16A for the concentration of TRS.

(2) Method 3 for gas analysis, and

(3) When determining compliance with § 60.283(a)(4), use the results of Method 2. Method 16 or 16A, and the black liquor solids feed rate in the following equation to determine the TRS emission rate on an equivalent hydrogen sulfide (H2S) basis.

$E \approx (C_{TRS})(F)(Q_{sd})/BLS$

Where:

E=mass of TRS emitted per unit of black liquor solids (g/kg)(lb/ton).

CTRS = average combined concentration of TRS as determined by Method 16 or 16A during the test period, ppm.

F=0.001417 g H₂S/m³ ppm for metric units. =0.08844×10- lb H2S/ft ppm for English

Quedry volumetric stack gas flow rate corrected to standard conditions, dscm/hr (dscf/hr).

BLS=black liquor solids feed rate, kg/hr Air Act, as amended August 1977, to (ton/hr).

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(4) When determining whether a furnace is a straight kraft recovery furnace or a cross recovery furnace. TAPPI Method T.624 (incorporated by reference—see § 60.17) shall be used to determine sodium sulfide, sodium hydroxide, and sodium carbonate. These determinations shall be made three times daily from the green liquor and the daily average values shall be converted to sodium oxide (Na2O) and substituted into the following equation to determine the green liquor sulfidity:

$GLS = 100 C_{Ne2s}/(C_{Ne2} + C_{NeOH} + C_{Ne2COL})$

where:

GLS=percent green liquor sulfidity

CN23 = average concentration of Na2O expressed as Na₂O (mg/l)

CNOON = average concentration of NaOH expressed as Na₂O (mg/l)

C_{Na2CO3} = average concentration of Na₂CO₃ expressed as Na₂ (mg/l)

(5) When determining compliance with § 60.283(a)(1)(vi), use the results of Method 2, Method 16, and the pulp production rate in the equation specified in § 60.285(d)(3), except substitute the pulp production rate (PPR) [kg/ hr (tons/hr)] for the black liquor solids feed rate (BLS).

(e) Ali concentrations of particulate matter and TRS required to be measured by this section from lime kilns or incinerators shall be corrected 10 volume percent oxygen and those concentrations from recovery furnaces shall be corrected to 8 volume percent oxygen. These corrections shall be made in the manner specified in § 60.284(c)(3).

[43 FR 7572, Feb. 23, 1978, as amended at 48 FR 3738, Jan. 27, 1983; 50 FR 6318, Feb. 14, 1985; 50 FR 9579, Mar. 8, 1985; 50 FR 19022, May 6, 19851

§ 60.286 Innovative technology waiver.

(a) Pursuant to section 111(j) or the Clean Air Act. 42 U.S.C. 7411(i), the No. 10 batch digester at Owens-Illinois Incorporated's Valdosta kraft pulp mill in Clyattville, Georgia, shall comply with the following conditions:

(1) Owens-Illinois, Incorporated shall obtain the necessary permits as required by section 173 of the Clean operate the No. 10 batch digester at the Valdosta mill.

(2) Commencing on February 14. 1985, and continuing for 2 years or to December 31, 1986, or until the displacement heating system that can achieve the standard specified in 40 CFR 60.283 is demonstrated to the Administrator's satisfaction, whichever comes first. Owens Illinois, Incorporated shall limit the discharge of TRS emissions to the atmosphere:

(i) From the No. 10 batch digester at the Valdosta mill to 0.02 lb of TRS per ton of air-dried pulp.

(ii) From the existing multiple-effect evaporators at the Valdosta mill to the TRS level existing prior to the modifications.

(3) Commencing the day after the expiration of the period described in paragraph (a)(2) of this section, and continuing thereafter, emissions of TRS from the No. 10 batch digester shall not exceed the TRS level of 0.005 g/kg ADP (0.01 lb/ton ADP) as specified in § 60.283 of this part.

(4) The No. 10 batch digester system shall comply with the provisions of §§ 60.284 and 60.285.

(5) A technology development report shall be sent to EPA, Emission Standards and Engineering Division (MD-13), Research Triangle Park, North Carolina 27711 and EPA Region IV, 345 Courtland, NE, Atlanta, Georgia 30365, postmarked before 60 days after the promulgation of this waiver and every 6 months thereafter while this waiver is in effect. The technology development report shall summarize the displacement heating system work including the results of tests of the various emission points being evaluated. The report shall include an updated schedule of attainment of 40 CFR 60.283 based on the most current information. Tests will be conducted prior to and after the digester modifications for TRS emissions and air flow rates on all vents to the atmosphere from the No. 10 digester system, the multiple effect evaporator system, and at the existing batch digester system. In addition, tests will be performed to determine the BOD content of the effluents from the multiple effect evaporator system, the brown stock washing

system, and the mill prior to and after the digester modifications.

(b) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for Owens-Illinois, Incorporated to operate the No. 10 batch digester or the multiple-effect evaporators in violation of the requirements established in this waiver. Violations of the terms and conditions of this waiver shall subject Owens-Illinois, Incorporated to enforcement under section 113 (b) and (c), 42 U.S.C. 7412 (b) and (c), and section 120, 42 U.S.C. 7420, of the Act as well as possible citizen enforcement under section 304 of the Act. 42 U.S.C. 7604.

[50 FR 6317, Feb. 14, 1985; 50 FR 7595, Feb. 25, 1985]

Subpart CC—Standards of Performance for Glass Manufacturing Plants

Source: 45 FR 66751, Oct. 7, 1980, unless otherwise noted.

§ 60.290 Applicability and designation of affected facility.

(a) Each glass melting furnace is an affected facility to which the provisions of this subpart apply.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 15, 1979, is subject to the requirements of this subpart.

(c) This subpart does not apply to hand glass melting furnaces, glass melting furnaces designed to produce less than 4,550 kilograms of glass per day and all-electric melters.

§ 60.291 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in Subpart A of this part, unless otherwise required by the context.

"All-electric melter" means a glass melting furnace in which all the heat required for melting is provided by electric current from electrodes submerged in the molten glass, although some fossil fuel may be charged to the furnace as raw material only.

"Borosilicate recipe" means glass product composition of the following approximate ranges of weight proportions: 60 to 80 percent silicon dioxide, 4 to 10 percent total R₂O (e.g., Na₂O and K₂O), 5 to 35 percent boric oxides, and 0 to 13 percent other oxides.

"Container glass" means glass made of soda-lime recipe, clear or colored, which is pressed and/or blown into bottles, jars, ampoules, and other products listed in Standard Industrial Classification 3221 (SIC 3221).

"Experimental furnace" means a glass melting furnace with the sole purpose of operating to evaluate glass melting processes, technologies, or glass products. An experimental furnace does not produce glass that is sold (except for further research and development purposes) or that is used as a raw material for nonexperimental furnaces.

"Flat glass" means glass made of soda-lime recipe and produced into continuous flat sheets and other products listed in SIC 3211.

"Flow channels" means appendages used for conditioning and distributing molten glass to forming apparatuses and are a permanently separate source of emissions such that no mixing of emissions occurs with emissions from the melter cooling system prior to their being vented to the atmosphere.

"Glass melting furnace" means a unit comprising a refractory vessel in which raw materials are charged. melted at high temperature, refined, and conditioned to produce molten glass. The unit includes foundations. superstructure and retaining walls. raw material charger systems, heat exchangers, melter cooling system, exhaust system, refractory brick work, fuel supply and electrical boosting equipment, integral control systems and instrumentation, and appendaces for conditioning and distributing molten glass to forming apparatuses. The forming apparatuses, including the float bath used in flat glass manufacturing and flow channels in wool fiberglass and textile fiberglass manufacturing, are not considered part of the elass melting furnace.

"Glass produced" means the weight of the glass pulled from the glass melting furnace.

"Hand glass melting furnace" means a glass melting furnace where the molten glass is removed from the furnace by a glassworker using a blowpipe or a pontil.

"Lead recipe" means glass product composition of the following ranges of weight proportions: 50 to 60 percent silicon dioxide, 18 to 35 percent lead oxides, 5 tm 20 percent total R_2O (e.g., Na_2M and K_2O), 0 to 8 percent total R_2O (e.g., Al_2O_3), 0 to 15 percent total R_2O (e.g., CaO, MgO), other than lead oxide, and 5 to 10 percent other oxides.

"Pressed and blown glass" means glass which is pressed, blown, or both, including textile fiberglass, noncontinuous flat glass, noncontainer glass, and other products listed in SIC 3229. It is separated into:

- (1) Glass of borosilicate recipe.
- (2) Glass of soda-lime and lead recipes.
- (3) Glass of opal, fluoride, and other recipes.

"Rebricking" means cold replacement of damaged or worn refractory parts of the glass melting furnace. Rebricking includes replacement of the refractories comprising the bottom, sidewalls, or roof of the melting vessel: replacement of refractory work in the heat exchanger; replacement of refractory portions of the glass conditioning and distribution system.

"Soda-lime recipe" means glass product composition of the following ranges of weight proportions: 60 to 75 percent silicon dioxide, 10 to 17 percent total R₂O (e.g., Na₂O and K₂O), 8 to 20 percent total RO but not to include any PbO (e.g., CaO, and MgO), 0 to 8 percent total R₂O₃ (e.g., Al₂O₃), and 1 to 5 percent other oxides.

"Textile fiberglass" means fibrous glass in the form of continuous strands having uniform thickness.

"With modified-processes" means using any technique designed to minimize emissions without the use of addon pollution controls.

"Wool fiberglass" means fibrous glass of random texture, including fiberglass insulation, and other products listed in SIC 3296.

[45 FR 66751, Oct. 7, 1980, as amended at 49 FR 41035, Oct. 19, 1984]

§ 60.292 Standards for particulate matter.

(a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator of a glass melting furnace subject to the provisions of this subpart shall cause to be discharged into the atmosphere—

(1) From any glass melting furnace fired exclusively with either a gaseous fuel or a liquid fuel, particulate matter at emission rates exceeding those specified in Table CC-1, Column 2 and Column 3, respectively, or

(2) From any glass melting furnace, fired simultaneously with gaseous and liquid fuels, particulate matter at emission rates exceeding STD as specified by the following equation:

STD = X [1.3(Y) + (Z)]

Where:

STD=Particulate matter emission limit, g of particulate/kg of glass produced.

- X=Emission rate specified in Table CC-1 for furnaces fired with gaseous fuel (Column 2).
- Y=Decimal percent of liquid fuel heating value to total (gaseous and liquid) fuel heating value fired in the glass melting furnaces as determined in § 60.296(f). (joules/joules).

Z = (1-Y).

- (b) Conversion of a glass melting furnace to the use of liquid fuel is not considered a modification for the purposes of § 60.14.
- (c) Rebricking and the cost of rebricking is not considered a reconstruction for the purposes of § 60.15.
- (d) An owner or operator of an experimental furnace is not subject to the requirements of this section.
- (e) During routine maintenance of add-on pollution controls, an owner or operator of a glass melting furnace subject to the provisions of paragraph (a) of this section is exempt from the provisions of paragraph (a) of this section if:
- (1) Routine maintenance in each calendar year does not exceed 6 days;
- (2) Routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions; and
- (3) A report is submitted to the Administrator 10 days before the start of

Commercial Utilization of Cold Blow and Extended Delignification Techniques in Batch Cooking

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INTRODUCTION

Conventional batch kraft cooking has many advantages in comparison with the continuous kraft process:

- High Availability
- · Simple Design and Operation
- · High Flexibility
- Low Sensitivity to Chip Quality Variations
- Low K-no. Variations
- Easily Expanded to High Production

On the other hand energy demand for continuous cooking has typically been about 40% lower than for the conventional batch process. This means that it has been necessary to develop a more energy efficient batch technology.

At the same time new process technologies aiming at more selective delignification have been developed. The extended delignification technology offers the possibility to reach lower Kno.s, thereby reducing the bleach chemical consumption as well as the effluent from the bleach plant.

These new technologies, cold blow and extended delignification, have been tested in full scale at the ASSI Karlsborg mill in Sweden. Based upon successful results, Karlsborg decided in 1984, to convert their 9350 cu. ft. batch digesters to the Sunds cold blow and extended delignification techniques. Start-up of the new system was in September 1985.

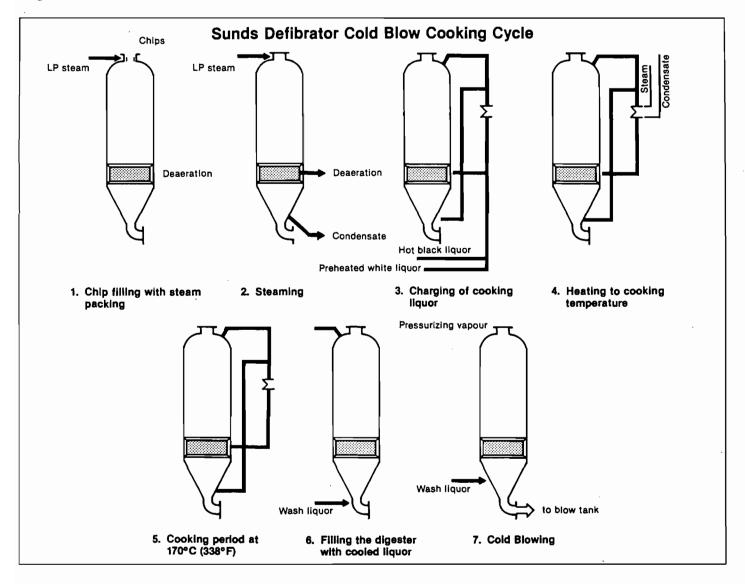
THE COLD BLOW SYSTEM

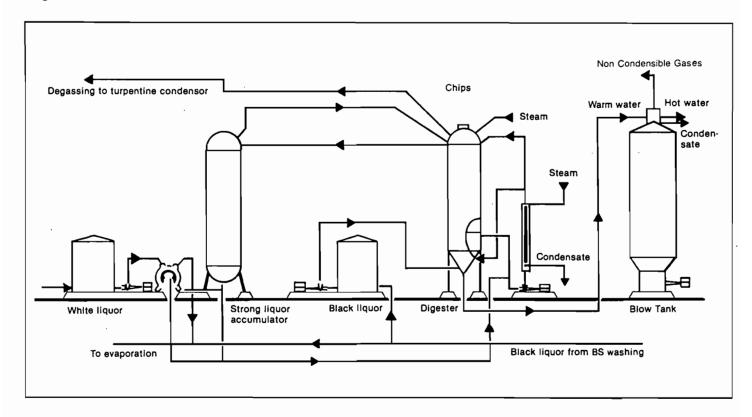
The cold blow technique (*Figure 1*) comprises the following steps:

- Chip filling where the chips are evenly distributed and packed within the digester preferably by utilizing a steam packer.
- After the digester has been filled with chips it is steamed with low pressure steam, added at the top of the digester. Air is vented through the strainers until the chips are preheated to about 210°F.
- White liquor preheated in a heat exchanger to almost cooking temperature and hot black liquor from a pressurized accumulator are charged to the digester. After liquor charging, the digester content will have a temperature of about 290°F as compared to 170-190°F for a conventional batch system.
- The higher starting temperature will result in a shorter heating time and also reduce the steam consumption for heating. As mentioned, the heating can be performed either directly or indirectly.
- The digester is then kept at cooking temperature and pressure until the target K-no. is reached.
- Cooking is interrupted by charging washer filtrate to the bottom of the digester, thus displacing the hot cooking liquor through strainers at the top of the digester. The hot liquor is collected in the accumulator. The digester content is cooled down to about 210°F. The hot black liquor in the accumulator is utilized for preheating of white liquor as well as for recharging black liquor in the next cook.

• The actual blowing of the digester starts by opening the blow valve. Pressure in the digester is maintained by connecting the accumulator to the top of the digester. The cold blow is more rapid and efficient than a conventional hot blow due to the reduced flashing. The cold blow technique has proven to eliminate TRS emissions from the digester area since gases relieved from the blow tank are condensed in an indirect condenser. The noncondensable gases leaving the condenser can either be burned in the lime kiln or in a separate burner.

Figure 1.





A principle flow sheet for the cold blow system is shown in Figure 2. No conventional blow heat recovery is required. The hot liquor accumulator, the white liquor heat exchanger, and the black liquor tank for cooling liquor are characteristic for the cold blow system. Furthermore, less digester volume is required for a certain capacity due to the reduced time for heating and an overall shorter cooking cycle compared to a conventional batch system.

Table 1 compares energy consumption for direct and indirect heating with conventional hot blow as well as cold blow. Conventional hot blow with indirect heating results in lower energy consumption in cooking and evaporation than direct heating since the steam condensate can be recycled to the boiler house. Cold blow reduces steam consumption as the white liquor is preheated and the hot black liquor is recharged to the digester, resulting in a higher starting temperature.

Table 1.

ENERGY CONSUMPTION (Million BTU/Ton)				
	Hot Blow		Cold Blow	
	Direct Heating	Indirect <u>Heating</u>	Direct Heating	Indirect Heating
COOKING EVAPORATION	4.5 4.5	3.9 <u>3.5</u>	2.5 4.0	2.3 3.6
TOTAL	9.0	7.4	6.5	5.9