#### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

In the matter of an Application for Permit by:

Seminole Kraft Corporation 9469 East Port Road Jacksonville, FL 32229

DEP File No. AC16-222359 PSD-FL-198 Duval County

Enclosed is Permit Number AC16-222359 (PSD-FL-198) to construct three packaged steam boilers at their existing facility in Jacksonville, Duval County, Florida, issued pursuant to Section(s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400 904-488-1344

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on \_\_\_\_\_\_\_ to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED. on this date, pursuant to \$120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged. / /

Copies furnished to:

J. Cole, NED R. Roberson, RESD

J. Bunyak, NPS

D. Buff, KBN
B. Collum, GEPD
C. Hurd, SKC
R. Donelan, OGC

#### Final Determination

Seminole Kraft Corporation Duval County, Florida

Construction Permit No. AC 16-222359 (PSD-FL-198)

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

#### Final Determination

#### Seminole Kraft Corporation

AC 16-222359 (PSD-FL-198)

The construction permit application package and supplementary material have been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in The Florida Times-Union on April 25 and May 11, 1993. The original Technical Evaluation and Preliminary Determination (TE&PD) and Revised TE&PD were distributed on April 2 and April 21, respectively, were made available for public inspection at the Department's Northeast District and Bureau of Air Regulation offices and the City of Jacksonville's Regulatory & Environmental Services Department (RESD).

Comments were received from the applicant during the public notice period. The Department's response to the comments are as follows (note: each response is numbered to correspond to each comment) and the change or new language will be in "bold print":

- I. Construction Permit No. AC 16-222359 (PSD-FL-198)
- A. Mr. Ron L. Roberson's letter received April 20, 1993.
- 1. The Department agrees with the request and the change will be made. Also, a requirement for calculating actual SO<sub>2</sub> emissions will be established.

#### Specific Condition No. 7.:

- FROM: Before this construction permit expires, the common packaged boiler stack shall be tested and monitored for compliance with the emission limits in Specific Conditions Nos. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR 60.46b(e)(3). Compliance with SO<sub>2</sub> limits shall be in accordance with 40 CFR 60.49b(r). Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.
  - TO: Before this construction permit expires, each packaged boiler shall be tested and monitored for compliance with the emission limits in Specific Conditions Nos. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR 60.46b(e)(3). Compliance with SO2 limits shall be in accordance with 40 CFR 60.49b(r); and, a stoichiometric quantification for SO2 emissions shall be utilized using the actual density and sulfur weight percent and the quantity of fuel oil fired monthly. Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.

2. Based on a phone conversation with Mr. Roberson (RESD) and Mr. Bruce Mitchell, edits to Specific Conditions Nos. 8, 9 and 11 were pointed out for clarification purposes and the following will be changed:

#### Specific Condition No. 8 .:

- FROM: The DER Northeast District office and the RESD (Regulatory and Environmental Services Department) shall be notified at least 15 days prior to the compliance tests. Compliance test results shall be submitted to the DER Northeast District office and the Bureau of Air Regulation office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.
  - TO: The Department's Northeast District office and the RESD (City of Jacksonville's Regulatory and Environmental Services Department) office shall be notified at least 15 days prior to the compliance tests. Compliance test results shall be submitted to the Department's Northeast District and Bureau of Air Regulation offices and the RESD office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.

#### Specific Condition No. 9.:

- FROM: The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The Regulatory and Environmental Services Division of Jacksonville shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.
- TO: The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the

No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the **Department**'s Bureau of Air Regulation, within 30 days of written confirmation by the **Department** of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The R**ESD office** shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.

#### Specific Condition No. 11.:

- FROM: An application for an operation permit must be submitted to the Northeast District office and the RESD at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).
- TO: An application for an operation permit must be submitted to the **Department's** Northeast District office and the RESD **office** at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).
- B. Mr. Brian L. Beals's letter received April 22, 1993.
- 1. No comments are required because of concurrence.
- C. Mr. James W. Pulliam, Jr.'s letter received May 21, 1993.
- 1. The Department agrees with the request and the condition will be established. Also, an additional requirement for a lab analysis to accompany each fuel oil delivery will be established in order to calculate actual SO<sub>2</sub> emissions. In addition, SKC representatives requested that the Cedar Bay certification language be inserted for notice requirements. Further, the Department agreed during the Cedar Bay certification that the SKC boilers would be allowed to fire both natural gas and No. 2 fuel oil (limited to a maximum

0.05% sulfur, by weight) and having a total emission limitation of 25 tons/year of SO<sub>2</sub>; however, circumstances would allow for further approval of an additional 16 tons/year. The following changes/addition should reflect the above points:

#### Specific Condition No. 4.:

FROM: Sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent by weight. Annual SO2 emissions, total for all three boilers, shall not exceed 25 tons per year. In the event that the ceiling for SO2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO2 from the three steam boilers exceed a ceiling of 41 tons per year.

TO: The three packaged boilers are permitted to fire both natural gas and No. 2 fuel oil, with the primary fuel being natural gas. The sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. Any delivery of No. 2 fuel oil shall be accompanied by a laboratory analysis quantifying the density and percent sulfur, by weight. Annual SO<sub>2</sub> emissions from No. 2 fuel oil firing, total all three boilers, shall not exceed 25 tons/year. the event that the ceiling for SO2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO<sub>2</sub> from the three steam boilers exceed 41 tons/year. The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SKC, without supporting documents, in a newspaper of general circulation in Jacksonville, Florida, as defined in Section 403.5115(2), F.S. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by the Department until final disposition of any administrative proceedings.

- D. Ms. Jewell A. Harper's letter received June 11, 1993.
- 1. Based on discussions with Mr. Scott Davis (EPA Region IV) and Mr. Bruce Mitchell, it was deemed acceptable to use the lab analyses of the No. 2 fuel oil deliveries and the actual fuel oil fired per month to stoichiometrically calculate the actual SO2 emissions in lieu of imposing additional emission limitations, which would require mass emissions stack testing or continuous emission monitoring for verification purposes. Therefore, see Specific Conditions Nos. 4 and 7. Also, for further clarification purposes, the following is established:

#### Specific Condition No. 12.: (new)

Pursuant to 40 CFR 49b(r), quarterly reports shall be submitted to the RESD office (i.e., Administrator) certifying that only very low sulfur oil (i.e.,  $\leq 0.05\%$  sulfur, by weight) meeting this definition was combusted in the affected facility during the preceding quarter. The firing of any fuel oil and its associated  $SO_2$  emissions shall be quantified on a monthly and per boiler basis and submitted to the RESD office by the end of the month following the end of each quarter. The quarters are defined as January- March, April-June, July-September, and October-December; also, and per boiler, the final quarterly report shall include the total amount of the fuel oil fired and the quantified associated  $SO_2$  emissions from the year.

II. BACT Determination to Permit No. AC 16-222359 (PSD-FL-198)

Pursuant to C.1. above, the Revised BACT determination will reflect that the boilers are permitted to fire both natural gas and No. 2 fuel oil as contained in Specific Condition No. 4 of the construction permit No. AC 16-222359. The following changes will be made to the text:

A. "BACT Determination by the Department"

FROM: During initial permitting discussions with SKC, the Department of Environmental Protection (Department) indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract. Therefore, the Department's determination of BACT is the use of natural gas as the primary fuel and No. 2 fuel oil (0.05% sulfur max.) as backup when natural gas is not available. Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

#### Pollutant Emission Limits Basis

$NO_{\mathbf{X}}$	23.6 lbs/hr and 103.4 tons/yr	Subpart Db (0.2 lb/mm BTU)
SO <sub>2</sub>	25 tons/yr total-3 boilers*	BACT (0.05%S)
VE	Natural Gas - 5% opacity	BACT
VE	No. 2 Fuel Oil - 10% opacity	BACT

- \* In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO<sub>2</sub> during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO<sub>2</sub> from the three steam boilers exceed 41 tons per year.
- TO: During initial permitting discussions with SKC, the Department of Environmental Protection (Department) indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract. Therefore, the Department's determination of BACT is to allow three packaged steam boilers to fire both natural gas and No. 2 fuel oil (maximum 0.05% sulfur, by weight), with the primary fuel being natural gas. Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

<u>Pollutant</u>	Emission Limits	<u>Basis</u>
NO <sub>X</sub> SO <sub>2</sub>	23.6 lbs/hr and 103.4 tons/yr 25 tons/yr total-3 boilers*	Subpart D <sub>b</sub> (0.2 lb/mm BTU) BACT (≤0.05% S, by wt. #2 Fuel Oil)
VE VE	Natural Gas - 5% opacity No. 2 Fuel Oil - 10% opacity	BACT BACT

\* In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO<sub>2</sub> during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative

proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO<sub>2</sub> from the three steam boilers exceed 41 tons/year. The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SKC, without supporting documents, in a newspaper of general circulation in Jacksonville, Florida, as defined in Section 403.5115(2), Florida Statutes. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by the Department until final disposition of any administrative proceedings.

- III. Attachmants to be Incorporated:
- 15. Technical Evaluation and Preliminary Determination (TE&PD) mailed 4/2/93.
- 16. Mr. Ronald L. Roberson's letter received 4/20/93.
- 17. Mr. Brian L. Beals's letter received 4/22/93.
- 18. Revised TE&PD mailed 4/21/93.
- 19. Public Notice received 5/7/93 (incomplete).
- 20. Mr. James W. Pulliam, Jr.'s letter received 5/21/93.
- 21. Public Notice received 5/27/93.
- 22. Ms. Jewell A. Harper's letter received 6/11/93.
- 23. Final Determination dated 7/7/93.

Therefore, it is recommended that the construction permit, No. AC 16-222359 (PSD-FL-198), and associated BACT Determination, be issued as drafted, with the above referenced revisions incorporated.

Attachment 16

## DEPARTMENT OF REGULATORY & ENVIRONMENTAL SERVICES

Air Quality Division

April 16, 1993

Mr. Preston Lewis Department of Environmental Regulation Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400

RE: Seminole Kraft Corporation Three (3) Gas Fired Boilers

Permit AC16-222359 PSD-FL-198

Dear Mr. Lewis:

The Air Quality Division (AQD) has received the above referenced permit and offers the following comments for consideration.

RECEIVED

The permit draft has established allowable emissions limits for each individual boiler, but Specific Condition 8., which describes testing requirements for demonstration of compliance does not clearly define how compliance will be demonstrated.

Specific Condition 8. Before this construction permit expires, the common packaged boiler stack shall be tested and monitored for compliance with the emission limits in Specific Condition Nos. 4, 5, and 6. Compliance tests for NO<sub>x</sub> shall be conducted in accordance with 40 CFR 60.46b(e)(3). Compliance with SO<sub>2</sub> limits shall be in accordance with 40 CFR 60.49b(r). Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.

AQD questions the intent of the underlined portion of Specific Condition 8. The condition as it currently reads implies that the common stack is to be tested for each pollutant regulated. Previous conditions limiting regulated pollutants do not state any aggregate or total emission limits. For demonstration of compliance, each boiler should be required to demonstrate that the allowable emission limits can be achieved on an individual basis.

AQD suggests that Specific Condition 8. delete the language "the common packaged boiler stack" and replace it with "each packaged boiler", to clearly indicate that each boiler should be tested individually. AQD does not recommend simultaneous testing of the three packaged boilers for any pollutant other than visible emissions.

Please address any questions or comments to me at (904) 630-3666.

Very truly yours,

Ronald L. Roberson Associate Engineer

cc: AQD Permitting File

Mr. Wayne Walker - AQD
421 West Church Street - Suite 412
Jacksonville, Florida 32202-4111

B. Michell B. Wichell B. Willaday C. Drey, NED Q. Harper, EPA

Area Code 904/630-3666

5 ............ Attachment 17



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365 . . .

RECEIVED

4APT-AEB

APR 19 1993

APR 22 1993

Division of Air Resources Management

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

RE: Seminole Kraft Corporation, Duval County (PSD-FL-198)

Dear Mr. Fancy:

This is to acknowledge receipt of the Technical Evaluation and Preliminary Determination, including the draft Prevention of Significant Deterioration (PSD) permit, for the above referenced facility, by your letter dated March 31, 1993. The existing Seminole Kraft Corporation facility is a 100-percent recycled fiber paper mill. The proposed modification to the existing facility will be the addition of three package boilers, to be fired with fuel oil and natural gas.

Your determination proposes to limit  $SO_2$  emissions through limiting the sulfur content of the distillate fuel oil and to limit beryllium emissions through efficient combustion and the use of ash free and low ash fuels.

We have reviewed the package as submitted and have no adverse comments. Thank you for the opportunity to review and comment on the package. If you have any questions or comments, please contact either Mr. Lew Nagler for modeling/monitoring or Mr. Scott Davis of my staff at (404) 347-5014.

Sincerely yours,

Brian L. Beals, Chief Source Evaluation Unit Air Enforcement Branch

Air, Pesticides, and Toxics

Management Division

CC: G. Lundds
B. Mitchell
C. Holladay
E. Delusen, DCAOD
G. Bunyak, NPS
P. Collom, & DNR

Attachment 20



### United States Department of the Interior



FISH AND WILDLIFE SERVICE 75 Spring Street, S.W. Atlanta, Georgia 30303

May 19, 1993

RECEIVED

MAY 2 1 1993

Mr. C. H. Fancy Chief, Bureau of Air Regulation Florida Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Division of Air Resources Management

Dear Mr. Fancy:

We have reviewed Seminole Kraft Corporation's (SKC) permit application and the State's April 16, 1993, Technical Evaluation and Preliminary Determination and proposed permit conditions for the project. We understand that SKC is proposing to install three packaged steam boilers at their recycled fiber mill facility in Jacksonville, while contemporaneously shutting down several boilers and pulping facilities. As you know, the Jacksonville facility is located approximately 45 km southeast of the Okefenokee Wilderness Area (WA) and 90 km southwest of the Wolf Island WA, both Class I air quality areas administered by the Fish and Wildlife Service.

In their application, SKC proposed firing fuel oil with a maximum sulfur content of 0.5 percent as the primary fuel, with natural gas as the backup fuel. We are pleased to see that SKC has now agreed to fire natural gas as the primary fuel, and use fuel oil with a maximum sulfur content of 0.05 percent as backup. This fuel usage, combined with the emissions credits resulting from the shutdown of old equipment, will result in projected emissions of all pollutants well below the PSD-significant amounts. Based on the currently proposed emissions and the distance to the Class I areas, we do not expect that the SKC project will adversely affect resources in either the Okefenokee or Wolf Island WA's.

We do have one comment regarding the permit conditions contained in the April 16 notice. Although the permitted emission limits are based on SKC firing natural gas as the primary fuel with fuel oil as backup, the proposed permit conditions do not specify this fuel use requirement. We recommend that you include a specific permit condition discussing this requirement in the final permit.

If you have any questions regarding our comments, please contact Sandra Silva of our Air Quality office in Denver at 303/969-2071.

Sincerely yours,

James W. Pulliam, Jr.
Regional Director

cc:
Jewell Harper, Chief
Air Enforcement Branch
Air, Pesticides and Toxic Management Division
U.S. EPA, Region 4
345 Courtland Street, NE.
Atlanta, Georgia 30365

Mr. James A. Heard Attorney at Law 2902 Independent Square Jacksonville, Florida 32202

J. Flynolds

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Attachment 22



## UNITED STATES ENVIRONMENTAL PROTECTION AGENT ECEIVE

REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365 JUN 1 4 1993

**4APT-AEB** 

JUN - 8 1993

Division of Air Resources Management

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JUN 1 1 1993

D.E.R. OFFICE OF THE SECRETARY

Mr. Clair H. Fancy, P.E., Chief Bureau of Air Regulation Florida Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road

Tallahassee, Florida 32399-2400

RE: Seminole Kraft Corporation, Duval County (PSD-FL-198)

Dear Mr. Fancy:

This is to acknowledge receipt of the Revised Technical Evaluation and Preliminary Determination, including the draft Prevention of Significant Deterioration (PSD) permit, for the above referenced facility, by your letter dated April 20, 1993. The existing Seminole Kraft Corporation facility is a 100-percent recycled fiber paper mill. The proposed modification to the existing facility will be the addition of three package boilers, to be fired with fuel oil and natural gas.

Your determination proposes to limit SO<sub>2</sub> emissions through limiting the sulfur content of the distillate fuel oil and to limit beryllium emissions through efficient combustion and the use of ash free and low ash fuels.

We have reviewed the package as submitted and have the following comments concerning the draft permit. In Specific Condition 4 of the permit, the emission limit for  $SO_2$  should include a basis for the 25 tons per year limit, in a lb/MMBtu and lbs/hr increment (as established in Specific Condition 3 for  $NO_x$  emissions). In addition, we recommend a limit on the gallons of fuel oil used in any 12 consecutive month period, on the basis of 0.05% sulfur content and the maximum annual  $SO_2$  emission limit. For compliance purposes, monthly recordkeeping requirements should be included to enable data to be obtained for fuel oil usage on a 12 month rolling annual average basis.

Thank you for the opportunity to review and comment on the package. If you have any questions or comments, please contact Mr. Scott Davis of my staff at (404) 347-5014.

Sincerely yours,

Jewell A. Harper, Chief Air Enforcement Branch

Air, Pesticides, and Toxics Management Division

Printed on Recycled Paper



## Florida Department of **Environmental Protection**

Lawton Chiles Governor

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Virginia B. Wetherell Secretary

PERMITTEE:

Seminole Kraft Corporation 9469 East Port Road Jacksonville, Florida 32229 Permit Number: AC 16-222359 PSD-FL-198

Expiration Date: April 30, 1995

County: Duval

Latitude/Longitude: 30°25'15"N

81°36'00"W

Project: Three Packaged Steam

Boilers

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-210 through 297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department of Environmental Protection (Department) and made a part hereof and specifically described as follows:

For the construction of three 125,000 lbs/hr packaged process steam boilers. The facility is located at 9469 East Port Road, Jacksonville, Duval County, Florida. UTM coordinates of the site are: Zone 17, 441.8 km E and 3,365.6 km N.

Emissions shall be controlled by using clean fuels and good combustion practices.

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

#### Attachments are listed below:

- Letter (with proposed gas contract) from Oertel to Pennington (12/3/92).
- Letter from KBN to the Department (12/9/92).
- 3. Letter from Georgia DNR to the Department (12/10/92).
- 4. Letter from KBN to the Department (12/22/92).
- 5. Incompleteness letter from the Department to SKC (12/23/92).
- Letter from KBN to the Department (12/23/92).
- 7. Second Incompleteness letter from the Department to SKC (1/5/93).
- 8. Letter from KBN to the Department (1/8/93).
- 9. Letter from EPA to the Department (1/15/93).
- 10. Letter from Oertel to the Department (1/19/93).
- 11. Third Incompleteness letter from the Department to SKC (1/25/93).
- 12. Letter from Oertel to the Department (1/29/93). 13. Letter from Oertel to the Department (1/29/93).
- 14. Completeness letter from the Department to SKC (2/10/93).
- 15. Technical Evaluation and Preliminary Determination (TE&PD) mailed 4/2/93.

Page 1 of 7

Permit Number: AC 16-222359

PSD-FL-198

Expiration Date: April 30, 1995

#### Attachments cont.:

16. Mr. Ronald L. Roberson's letter received 4/20/93.

17. Mr. Brian L. Beals's letter received 4/22/93.

18. Revised TE&PD mailed 4/21/93.

19. Public Notice received 5/7/93 (incomplete).

20. Mr. James W. Pulliam, Jr.'s letter received 5/21/93.

21. Public Notice received 5/27/93.

22. Ms. Jewell A. Harper's letter received 6/11/93.

23. Final Determination dated 7/7/93.

#### GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.). The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

Permit Number: AC 16-222359 PSD-FL-198

Expiration Date: April 30, 1995

#### GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy any records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source

Permit Number: AC 16-222359 PSD-FL-198

Expiration Date: April 30, 1995

#### GENERAL CONDITIONS:

which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

- 10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code (F.A.C.) Rules 17-4.120 and 17-730.300, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:

  - (x) Determination of Prevention of Significant Deterioration; and,
  - (x) Compliance with New Source Performance Standards (NSPS).
- 14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

Permit Number: AC 16-222359

PSD-FL-198

Expiration Date: April 30, 1995

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and,
- the results of such analyses.

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

#### SPECIFIC CONDITIONS:

- 1. The construction and operation of these sources shall be in accordance with the capacities stated in the Revised Technical Evaluation and Preliminary Determination.
- 2. The packaged boilers may be operated continuously (8760 hrs/yr).
- 3. The maximum allowable NOx emissions shall not exceed 0.2 lb/MMBtu, 23.6 lbs/hr, and 103.4 tons/yr per boiler.
- The three packaged boilers are permitted to fire both natural gas and No. 2 fuel oil, with the primary fuel being natural gas. The sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. Any delivery of No. 2 fuel oil shall be accompanied by a laboratory analysis quantifying the density and percent sulfur, by weight. Annual SO<sub>2</sub> emissions from No. 2 fuel oil firing, total all three boilers, shall not exceed 25 tons/year. In the event that the ceiling for  $SO_2$  is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO2 from the three steam boilers exceed 41 tons/year. The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SKC, without supporting documents, in a newspaper of general circulation in Jacksonville,

Permit Number: AC 16-222359 PSD-FL-198

Expiration Date: April 30, 1995

#### SPECIFIC CONDITIONS:

Florida, as defined in Section 403.5115(2), F.S. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by the Department until final disposition of any administrative proceedings.

- 5. Visible emissions (VE) shall not exceed 5% opacity during natural gas firing and 10% opacity during fuel oil firing.
- 6. In accordance with requirements of 40 CFR 60.48(b), a monitoring system (CEMS) for nitrogen oxides shall be installed, operated, and maintained. Also, the natural gas, fuel oil and steam flows (both from the packaged boilers and from the CBCP facility) shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to the Department upon request.
- 7. Before this construction permit expires, each packaged boiler shall be tested and monitored for compliance with the emission limits in Specific Conditions No. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR 60.46b(e)(3). Compliance with SO2 limits shall be in accordance with 40 CFR 60.49b(r); and, a stoichiometric quantification for SO2 emissions shall be utilized using the actual density and sulfur weight percent and the quantity of fuel oil fired monthly. Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.
- 8. The Department's Northeast District office and the RESD (City of Jacksonville's Regulatory and Environmental Services Department) office shall be notified at least 15 days prior to the compliance tests. Compliance test results shall be submitted to the Department's Northeast District and Bureau of Air Regulation offices and the RESD office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.
- 9. The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the Department's Bureau of Air Regulation, within 30 days of written confirmation by the Department of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The RESD office shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.

Permit Number: AC 16-222359

PSD-FL-198

Expiration Date: April 30, 1995

#### SPECIFIC CONDITIONS:

10. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

- 11. An application for an operation permit must be submitted to the Department's Northeast District office and the RESD office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).
- 12. Pursuant to 40 CFR 49b(r), quarterly reports shall be submitted to the RESD office (i.e., Administrator) certifying that only very low sulfur oil (i.e.,  $\leq 0.05$ % sulfur, by weight) meeting this definition was combusted in the affected facility during the preceding quarter. The firing of any fuel oil and its associated SO<sub>2</sub> emissions shall be quantified on a monthly and per boiler basis and submitted to the RESD office by the end of the month following the end of each quarter. The quarters are defined as January-March, April-June, July-September, and October-December; also, and per boiler, the final quarterly report shall include the total amount of the fuel oil fired and the quantified associated SO<sub>2</sub> emissions from the year.

Issued this 7th day

of **Fal**y , 1993

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary

Revised Best Available Control Technology (BACT) Determination Seminole Kraft Corporation Duval County PSD-FL-198 AC 16-222359

The applicant proposes to install three packaged boilers at their recycled fiber paper mill facility in Jacksonville, Duval County, Florida. Each of the three boilers will be sized to provide up to 125,000 lbs/hr of process steam for Seminole Kraft Corporation's (SKC) paper machines. SKC will also receive process steam from the adjacent Cedar Bay Cogeneration Project (CBCP). According to terms of the CBCP Site Certification proceedings, SKC is to be limited to a total steam production of 640,000 lbs/hr which includes 380,000 lbs/hr imported from the CBCP facility. This leaves 260,000 lbs/hr to be produced by the three packaged boilers under normal operating conditions. During periods when CBCP is not operating or operating at reduced rates, SKC will be allowed to make up the difference between the 380,000 lbs/hr and the steam production level that CBCP provides. This is equivalent to a maximum firing rate of 524 MMBTU/hr for all three SKC packaged boilers when the CBCP facility is down.

#### Date of Receipt of a Complete Application

February 10, 1993

#### BACT Determination Requested by Applicant

SKC's application called for the firing of fuel oil on a full time or as needed basis since a firm natural gas contract had not been obtained at the time of filing. Consequently, the application required a BACT determination for SO2 and beryllium since these pollutants would be emitted in amounts exceeding PSD-significant levels. BACT was proposed by the applicant as firing fuel oil with a 0.5 percent maximum sulfur content (0.3 average). Since there are no specific control technologies for beryllium, an uncontrolled beryllium emission level was proposed.

#### BACT Determination by the Department

During initial permitting discussions with SKC, the Department of Environmental Protection (Department) indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract.

Revised BACT Seminole Kraft Corp. Page Two

Therefore, the Department's determination of BACT is three packaged steam boilers being allowed to fire both natural gas and No. 2 fuel oil (maximum 0.05% sulfur, by weight), with the primary fuel being natural gas. Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

<u>Pollutant</u>	Emission Limits	<u>Basis</u>
NO <sub>X</sub> SO <sub>2</sub>	23.6 lbs/hr and 103.4 tons/yr 25 tons/yr total-3 boilers*	Subpart D <sub>b</sub> (0.2 lb/mm BTU) BACT (≤0.05% S, by wt. #2 Fuel Oil)
VE VE	Natural Gas - 5% opacity No. 2 Fuel Oil - 10% opacity	BACT

\* In the event that the ceiling for SO2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's In no event shall the total annual emissions of SO2 from the three steam boilers exceed 41 tons/year. The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SKC, without supporting documents, in a newspaper of general circulation in Jacksonville, Florida, as defined in Section 403.5115(2), Florida Statutes. filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by the Department until final disposition of any administrative proceedings.

#### BACT Determination Procedure

In accordance with Florida Administrative Code (F.A.C.) Rules 17-210 through 297, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available control methods, systems and techniques. In addition, the regulations require that in making the BACT determination the Department shall give consideration to:

Revised BACT Seminole Kraft Corp. Page Three

- (a) Any Environmental Protection Agency determination of BACT pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other State.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

#### BACT Determination Rationale

BACT review for particulate emissions and sulfur-dioxide are required under F.A.C. Rule 17-296.406. Visible emissions may be regulated as a surrogate parameter for PM/PM<sub>10</sub> and have been established at 5% opacity for natural gas fired boilers (10% opacity for No. 2 fuel oil).

For SO<sub>2</sub> emissions from oil firing, only two alternatives exist that would result in stringent SO<sub>2</sub> emissions; using low sulfur content fuel oil or flue gas desulfurization (FGD). EPA has recognized that FGD technology is inappropriate to apply to these combustion units. Sludge would be generated that would have to be disposed of properly, and there would be greatly increased costs associated with the construction and operation of a FGD system. Finally, there is no information in the literature to indicate that FGD has ever been applied to burning distillate oil. This leaves the use of natural gas and low sulfur fuel oil as backup as the best option for this project. Due to the anticipated availability of very low sulfur oil by October 1993, the Department will require the use of No. 2 fuel oil with 0.05% sulfur by weight as BACT.

Revised BACT Seminole Kraft Corp. Page Four

#### Details of the Analysis May be Obtained by Contacting:

Preston Lewis, P.E., BACT Coordinator Department of Environmental Protection Bureau of Air Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

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Recommended by:	Approved by:			
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C. H. Fancy, P.E., Chief Bureau of Air Regulation	Virginia B. Wetherell, Secretary Dept. of Environmental Protection			
July 7 1993 Date	7 July 1993 Date			



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Virginia B. Wetherell, Secretary

April 20, 1993

#### CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. L. A. Stanley, General Manager Seminole Kraft Corporation 9469 East Port Road Jacksonville, Florida 32229

Dear Mr. Stanley:

Attached is one copy of the Revised Technical Evaluation and Preliminary Determination and proposed permit for Seminole Kraft Corporation to construct three gas-fired packaged boilers at their facility in Duval County.

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

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/JR/kt

Attachments

cc: J. Cole, NED

R. Roberson, BESD

J. Harper, EPA

J. Bunyak, NPS

D. Buff, KBN

B. Collum, GEPD

C. Hurd, SKC

R. Donelan, OGC

### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

#### CERTIFIED MAIL

In the Matter of an Application for Permit by:

DER File No. AC16-222359 PSD-FL-198

Seminole Kraft Corporation 9469 East Port Road Jacksonville, Florida 32229

#### INTENT TO ISSUE

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

The applicant, Seminole Kraft Corporation, applied on November 24, 1992, to the Department of Environmental Regulation for a permit to construct three packaged boilers at their facility in Jacksonville, Duval County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-212 and 17-4. The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

Pursuant to Section 403.815, Florida Statutes and Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

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

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

The Petition shall contain the following information;

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

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

of the Department's action or proposed action;

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

(d) A statement of the material facts disputed by Petitioner,

if any;

- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this

proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

C. H. Fancy, F.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399 904-488-1344

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 4-21-93 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

Copies furnished to:

- J. Cole, NED
- R. Roberson, BESD
- J. Bunyak, NPS
- D. Buff, KBN
- B. Collum, GEPD
- C. Hurd, SKC
- R. Donelan, OGC

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF INTENT TO ISSUE PERMIT

The Department of Environmental Regulation gives notice of its intent to issue a permit to Seminole Kraft Corporation, 9469 East Port Road, Jacksonville, Florida 32229 to construct three packaged boilers at their facility in Jacksonville, Duval County, Florida. The maximum predicted all sources PSD Class II sulfur dioxide increments which would be consumed after this project is completed are the following:  $5.0 \text{ ug/m}^3$ , annual average, or 25% of the available annual increment of 20 ug/m<sup>3</sup>, 133 ug/m<sup>3</sup>, 24-hour average or 146% of the available 24-hour increment of 91 ug/m3; and 447 ug/m<sup>3</sup>, 3-hour average or 87% of the available 3-hour increment of  $512 \text{ ug/m}^3$ . Seminole Kraft and Cedar Bay combined do not contribute significantly to any predicted violations of the PSD Class II 24-hour increment. The maximum predicted PSD Class I sulfur dioxide increments which would be consumed are the following: ug/m<sup>3</sup>, annual average, or 0% of the available annual increment of 2.0 ug/m<sup>3</sup>; 4.1 ug/m<sup>3</sup>, 24-hour average or 82% of the available 24-hour increment of 5.0 ug/m<sup>3</sup>, and 19 ug/m<sup>3</sup>, 3-hour average or 76% of the available 3-hour increment of 25 ug/m<sup>3</sup>. A determination of Best Available Control Technology (BACT) was required. The Department is issuing this Intent to Issue for the reasons stated in the Revised Technical Evaluation and Preliminary Determination.

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

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or

statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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

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

Department of Environmental Regulation Bureau of Air Regulation 111 South Magnolia Drive Tallahassee, Florida

Department of Environmental Regulation Northeast District 7825 Baymeadows Way Jacksonville, Florida 32256-3767

Duval County Air Quality Division 421 West Church Street, Suite 412 Jacksonsville, Florida 32202-4111

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

Further, a public hearing can be requested by any persons. Such requests must be submitted within 30 days of this notice.

# Revised Technical Evaluation and Preliminary Determination

Seminole Kraft Corporation Duval County Jacksonville, Florida

Three Gas-Fired Packaged Boilers
Permit Number: AC 16-222359
PSD-FL-198

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

### I. Application

### A. Applicant

Seminole Kraft Corporation 9469 East Port Road Jacksonville, Florida 32229

### B. Project/Location/Classification

The Department received a complete application on February 10, 1993, for a permit to construct three packaged boilers at the Seminole Kraft Corporation (SKC) existing facility in Jacksonville, Duval County, Florida. The applicant's recycled fiber paper mill facility (SIC Code 2621) is located at 9469 East Port Road. UTM coordinates of the site are 441.8 km E and 3,365.6 km N.

On April 2, 1993, the Department issued its Intent to Issue package. Since that time, the Cedar Bay Cogeneration Plant project and its Certification process resulted in some negotiated changes, which affected some operational conditions to this project. Consequently, a revised Intent to Issue package has been made.

### II. Project Description

Seminole Kraft (SKC) proposes to install three 125,000 lbs/hr packaged steam boilers at their recycled fiber paper mill facility in Jacksonville, Florida, while contemporaneously shutting down several boilers and pulping facilities. SKC's project is tied in with the coal-fired Cedar Bay Cogeneration Project (CBCP), formerly known as AES Cedar Bay, by way of an agreement for SKC to receive a major portion of their process steam from the adjacent CBCP facility. Plans call for the CBCP facility to begin operation in early 1994. SKC requires that the three new packaged boilers be sized to provide enough steam to operate their largest paper machine independently of the CBCP facility during periods when CBCP does not operate.

SKC's conversion to a 100% recycled fiber paper mill was completed in 1992 by shutting down all kraft mill facilities processing virgin wood pulp. The equipment involved in the contemporaneous shutdowns is listed below:

Equipment	Date Shutdown	Date to be Shutdown
Recovery Boiler 1	September '92	-
Recovery Boiler 2	- II	-
Recovery Boiler 3	er .	-
Smelt Dissolving Tank 1	11	· <del>-</del>
Smelt Dissolving Tank 2	11	-
Smelt Dissolving Tank 3	**	-

Lime Kiln 1	**	-
Lime Kiln 2	11	-
Lime Kiln 3	**	-
Slaker No. 3	11	-
Bark Boiler 1	-	Early 1994*
Bark Boiler 2	_	- <b>11</b>
Power Boiler 1	_	11
Power Boiler 2	_	11
Power Boiler 3	_	·

\*These boilers are required to be taken out of service under provisions of the site certification for CBCP, with creditable emission reduction going to CBCP.

### III. Emissions

SKC submitted their application in November 1992, proposing to fire No. 2 fuel oil, with natural gas backup, as they had not been able to obtain a firm natural gas contract. Since then, SKC has obtained a contract for natural gas. Firing of fuel oil, as originally proposed, would result in emissions exceeding PSD significant rates for sulfur dioxide and beryllium, after applying contemporaneous emission reductions from the shutdowns listed above. Filing an application for oil firing triggered application of the Prevention of Significant Deterioration (PSD) rule, thus requiring a determination of Best Available Control Technology (BACT). This is discussed in the rule applicability section. Tabulated below are the emission credits and the actual emissions after application of BACT:

### Contemporaneous Emissions Credit (TPY)

Source	CO	PM/PM <sub>10</sub>	SO <sub>2</sub>	NOx	VOC	TRS	H2SO4
RB #1	1118.5	107.8	3.7	117.5	114.3	7.2	9.5
RB #2	1169.8	156.0	2.8	129.0	185.0	12.3	19.9
RB #3	468.5	129.7	1.2	139.5	36.6	14.0	13.9
LK #1	1.4	3.8	0.1	9.0	2.1	0.2	
LK #2	10.1	21.6	8.5	41.3	19.1	1.7	
LK #3	9.9	19.6	6.7	60.2	18.6	1.4	
SDT #1		22.6	2.9			1.6	
SDT #2		23.8	2.8			1.8	
SDT #3		36.9	2.9			1.6	
<u>Slaker</u>		0.9					
Totals:	2778.2	522.7	31.6	496.5	375.7	41.8	43.3

### Future Emissions (TPY) \*

Source	CO	PM/PM <sub>10</sub>	SO <sub>2</sub>	NOx	VOC	TRS	H2SO4
PB #1	184.2	3.6		103.4	0.7		negl.
PB #2	184.2	3.6	_	103.4	0.7		negl.
PB #3	184.2	3.6	-	103.4	0.7		negl.
Totals:	552.6	10.8	25**	310.2	2.1		negl.
Net Change:	-2225.6	-511.9	-24.1	-186.3	-373.6	-41.8	-43.3
PSD Level:	100	25/15	40	40	40	10	7

- \* See the revised BACT Determination for details on calculation of future emissions.
- \*\* In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO<sub>2</sub> during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO<sub>2</sub> from the three steam boilers exceed a ceiling of 41 tons per year.

Future emission were determined on the basis of fuel consumption levels contemplated during CBCP's site certification proceedings; namely, that the SKC packaged boilers would be permitted to operate such that when the SKC facility is importing 380 M lbs/hr of steam (heat equivalent of 456 MMBtu/hr) from CBCP, the SKC packaged boilers would produce 260 M lbs/hr for a total SKC steam production of 640 M lbs/hr. This steam production level is the basis of the modeling that was done for the CBCP facility and therefore is the basis for the allowable emission levels in the Department's proposed permit for the SKC packaged boilers. The 640 M lbs steam/hr is equivalent to a peak fuel consumption level of 354 MMBtu/hr when SKC is receiving 380 M lbs/hr of steam from the CBCP.

### IV. Rule Applicability

The proposed project is subject to preconstruction review in accordance with Chapter 403 of the Florida Statutes and Florida Administrative Code (F.A.C.) Chapters 17-210 through 297 and 17-4. The proposed facility will be located in an area classified as attainment for all regulated pollutants except ozone for which the area is designated as a transitional nonattainment area. The federal new source performance standards under 40 CFR Subpart Db (standards of performance for Industrial Steam Generating Units) apply for NOx control. Also, F.A.C. Rule 17-296.406, Fossil Fuel Steam Generators, applies to these boilers requiring a BACT analysis for particulate matter and sulfur dioxide.

As originally filed, the application is subject to the provisions of F.A.C. Rule 17-212.400, Prevention of Significant Deterioration (PSD), because the proposed oil-firing emissions, after applying offsets, would exceed PSD-significant levels for sulfur dioxide and beryllium. Upon applying Best Available Control Technology (BACT) required under the PSD rule, the firing of natural gas as the primary fuel resulted in emissions that are well below PSD-significant levels. This is somewhat unusual in that the application of BACT has resulted in the project netting out of PSD significance. Yet, the proposed facility remains a PSD project since, without application of BACT, the PSD-significant levels would be exceeded.

### V. AIR QUALITY IMPACT ANALYSIS

The applicant proposed emissions of sulfur dioxide and beryllium in PSD-significant amounts. The applicant submitted the air quality analysis required by the PSD regulations for these two pollutants. The applicant's SO<sub>2</sub> analysis was based on the proposed full time use of fuel oil with a maximum sulfur content of 0.5 percent (average 0.3 percent). The Department's revised BACT determination requires the use of natural gas instead of fuel oil as a primary fuel. This substantially restricts the emissions of both pollutants. Re-calculation of the emissions from the proposed project after the application of BACT shows that projected emissions of all pollutants are below PSD-significant amount.

Modeling results for full time fuel oil firing show predicted violations of the annual and 24-hour SO<sub>2</sub> ambient air quality standards (AAQS) of 60 ug/m<sup>3</sup> and 260 ug/m<sup>3</sup> and also of the 24-hour PSD Class II increment of 91 ug/m3. All of these predicted violations occur at a distance of 4.0 to 11.0 km southwest and west of Seminole Kraft. With the applicant's proposed use of 0.5 percent (maximum) sulfur fuel oil, there is one predicted violation of the 24-hour AAQS where Seminole Kraft and Cedar Bay combined contribute significantly to the violation. However, the Department's revised BACT determination restricts Seminole Kraft to the use of fuel oil containing a maximum sulfur content of only 0.05 percent as an emergency fuel when natural gas is unavailable. Modeling results based on the use of 0.05 percent fuel oil show that Seminole Kraft and Cedar Bay do not contribute significantly to this violation of Therefore, the Department has reasonable assurance that the proposed project, as described in the report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any AAQS or PSD increment.

### VI. Conclusion

Based on the information provided by Seminole Kraft, the Department has reasonable assurance that the proposed installation, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapters 17-210 thru 297 of the Florida Administrative Code.

word of the service o



### Florida Department of Environmental Regulation

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

Virginia B. Wetherell, Secretary

PERMITTEE:
Seminole Kraft Corp.
9469 East Port Road
Jacksonville, Florida 32229

Permit Number: AC16-222359 PSD-FL-198

Expiration Date: April 30, 1995

County: Duval

Latitude/Longitude: 30°25'15"N

81°36'00"W

Project: Three Gas-Fired Packaged Boilers

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-210 through 297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of three 125,000 lbs/hr packaged process steam boilers. The facility is located at 9469 East Port Road, Jacksonville, Duval County, Florida. UTM coordinates of the site are: Zone 17, 441.8 km E and 3,365.6 km N.

Emissions shall be controlled by using clean fuels and good combustion practices.

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

### Attachments are listed below:

- Letter (with proposed gas contract) from Oertel to Pennington (12/3/92).
- Letter from KBN to DER (12/9/92).
- 3. Letter from Georgia DNR to DER (12/10/92).
- 4. Letter from KBN to DER (12/22/92).
- 5. Incompleteness letter from DER to SKC (12/23/92).
- 6. Letter from KBN to DER (12/23/92).
- 7. Second Incompleteness letter from DER to SKC (1/5/93).
- Letter from KBN to DER (1/8/93).
- 9. Letter from EPA to DER (1/15/93).
- 10. Letter from Oertel to DER (1/19/93).
- 11. Third Incompleteness letter from DER to SKC (1/25/93).
- 12. Letter from Oertel to DER (1/29/93).
- 13. Letter from Oertel to DER (1/29/93).
- 14. Completeness letter from DER to SKC (2/10/93).

Page 1 of 6

Permit Number: AC16-222359 PSD-FL-198

Expiration Date: April 30, 1995

#### GENERAL CONDITIONS:

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

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

Permit Number: AC16-222359 PSD-FL-198

Expiration Date: April 30, 1995

### GENERAL CONDITIONS:

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

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

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

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

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

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

Permit Number: AC16-222359
P8D-FL-198
Expiration Date: April 30, 1995

### GENERAL CONDITIONS:

provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - (x) Determination of Best Available Control Technology (BACT)
  - (x) Determination of Prevention of Significant Deterioration
  - (x) Compliance with New Source Performance Standards (NSPS)
- 14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
  - the date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling or measurements;
  - the dates analyses were performed;
  - the person responsible for performing the analyses;

Permit Number: AC16-222359
PSD-FL-198
Expiration Date: April 30, 1995

### GENERAL CONDITIONS:

- 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 corrected promptly.

### SPECIFIC CONDITIONS:

- 1. The construction and operation of these sources shall be in accordance with the capacities stated in the Revised Technical Evaluation and Preliminary Determination.
- 2. The packaged boilers may be operated continuously (8760 hrs/yr).
- 3. The maximum allowable NOx emissions shall not exceed 0.2 lb/MMBtu, 23.6 lbs/hr, and 103.4 tons/yr per boiler.
- 4. Sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent by weight. Annual SO<sub>2</sub> emissions, total for all three boilers, shall not exceed 25 tons per year. In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO<sub>2</sub> during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO<sub>2</sub> from the three steam boilers exceed a ceiling of 41 tons per year.
- 5. Visible emissions (VE) shall not exceed 5% opacity during natural gas firing and 10% opacity during fuel oil firing.
- 6. In accordance with requirements of 40 CFR 60.48(b), a monitoring system (CEMS) for nitrogen oxides shall be installed, operated, and maintained. Also, the natural gas, fuel oil and steam flows (both from the packaged boilers and from the CBCP facility) shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to DER upon request.
- 7. Before this construction permit expires, the common packaged boiler stack shall be tested and monitored for compliance with the emission limits in Specific Conditions No. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR

Permit Number: AC16-222359
PSD-FL-198
Expiration Date: April 30, 1995

### SPECIFIC CONDITIONS:

60.46b(e)(3). Compliance with SO<sub>2</sub> limits shall be in accordance with 40 CFR 60.49b(r). Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.

- 8. The DER Northeast District office and the RESD (Regulatory and Environmental Services Department) shall be notified at least 15 days prior to the compliance tests. Compliance test results shall be submitted to the DER Northeast District office and the Bureau of Air Regulation office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.
- 9. The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The Regulatory and Environmental Services Division of Jacksonville shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.
- 10. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
- 11. An application for an operation permit must be submitted to the Northeast District office and the RESD at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Issued this	day
of	,1993
STATE OF FLORIDA OF ENVIRONMENTAL	

Virginia B. Wetherell, Secretary

### Revised Best Available Control Technology (BACT) Determination Seminole Kraft Corporation Duval County PSD-FL-198 AC16-222359

The applicant proposes to install three packaged boilers at their recycled fiber paper mill facility in Jacksonville, Duval County, Florida. Each of the three boilers will be sized to provide up to 125,000 lbs/hr of process steam for Seminole Kraft Corporation's (SKC) paper machines. SKC will also receive process steam from the adjacent Cedar Bay Cogeneration Project (CBCP). According to terms of the CBCP Site Certification proceedings, SKC is to be limited to a total steam production of 640,000 lbs/hr which includes 380,000 lbs/hr imported from the CBCP facility. This leaves 260,000 lbs/hr to be produced by the three packaged boilers under normal operating conditions. During periods when CBCP is not operating or operating at reduced rates, SKC will be allowed to make up the difference between the 380,000 lbs/hr and the steam production level that CBCP provides. This is equivalent to a maximum firing rate of 524 MMBTU/hr for all three SKC packaged boilers when the CBCP facility is down.

### Date of Receipt of a Complete Application

February 10, 1993

### BACT Determination Requested by Applicant

SKC's application called for the firing of fuel oil on a full time or as needed basis since a firm natural gas contract had not been obtained at the time of filing. Consequently, the application required a BACT determiniation for SO2 and beryllium since these pollutants would be emitted in amounts exceeding PSD-significant levels. BACT was proposed by the applicant as firing fuel oil with a 0.5 percent maximum sulfur content (0.3 average). Since there are no specific control technologies for beryllium, an uncontrolled beryllium emission level was proposed.

### BACT Determination by the Department

During initial permitting discussions with SKC, the Department indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract. Therefore, the Department's determination of BACT is the use of natural gas as the primary fuel and No. 2 fuel oil (0.05% sulfur max.) as backup when natural gas is not available. Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

Revised BACT Seminole Kraft Corp. Page Two

<u>Pollutant</u>	<b>Emission Limits</b>	<u>Basis</u>
NO <sub>X</sub> SO <sub>2</sub> VE VE	23.6 lbs/hr and 103.4 tons/yr 25 tons/yr total-3 boilers* Natural Gas - 5% opacity No. 2 Fuel Oil - 10% opacity	Subpart Db (0.2 lb/mm BTU) BACT (0.05%S) BACT BACT

\* In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO2 from the three steam boilers exceed a ceiling of 41 tons per year.

### BACT Determination Procedure

In accordance with F.A.C. Rules 17-210 through 297, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available control methods, systems and techniques. In addition, the regulations require that in making the BACT determination the Department shall give consideration to:

- Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other State.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to

Revised BACT Seminole Kraft Corp. Page Three

determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

### BACT Determination Rationale

BACT review for particulate emissions and sulfur-dioxide are required under F.A.C. Rule 17-296.406. Visible emissions may be regulated as a surrogate parameter for PM/PM<sub>10</sub> and have been established at 5% opacity for natural gas fired boilers (10% opacity for No. 2 fuel oil).

For SO<sub>2</sub> emissions from oil firing, only two alternatives exist that would result in stringent SO<sub>2</sub> emissions; using low sulfur content fuel oil or flue gas desulfurization (FGD). EPA has recognized that FGD technology is inappropriate to apply to these combustion units. Sludge would be generated that would have to be disposed of properly, and there would be greatly increased costs associated with the construction and operation of a FGD system. Finally, there is no information in the literature to indicate that FGD has ever been applied to burning distillate oil. This leaves the use of natural gas and low sulfur fuel oil as backup as the best option for this project. Due to the anticipated availability of very low sulfur oil by October 1993, the Department will required the use of No. 2 fuel oil with 0.05% sulfur by weight as BACT.

### Details of the Analysis May be Obtained by Contacting:

Preston Lewis, P.E., BACT Coordinator Department of Environmental Regulation Bureau of Air Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Recommended by:

C. H. Fancy, P.E., Chief Bureau of Air Regulation	Virginia B. Wetherell, Secretary Dept. of Environmental Regulation
1993	1993
Date	Date

Approved by:



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 lawton Chiles, Governor Virginia B. Wetherell, Secretary

March 31, 1993

### CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. L. A. Stanley, General Manager Seminole Kraft Corporation 9469 East Port Road Jacksonville, Florida 32229

Dear Mr. Stanley:

Attached is one copy of the Technical Evaluation and Preliminary
Determination and proposed permit for Seminole Kraft Corporation to
construct three gas-fired packaged boilers at their facility in
Duval County.

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

Sincerely,

C. H. Fancy, P.E

Chief

Bureau of Air Regulation

CHF/JR/kt

Attachments

cc: J. Cole, NED

R. Roberson, BESD

J. Harper, EPA

J. Bunyak, NPS

D. Buff, KBN

B. Collum, GEPD

C. Hurd, SKC

R. Donelan, OGC

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

### CERTIFIED MAIL

In the Matter of an Application for Permit by:

DER File No. AC16-222359 PSD-FL-198

Seminole Kraft Corporation 9469 East Port Road Jacksonville, Florida 32229

### INTENT TO ISSUE

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

The applicant, Seminole Kraft Corporation, applied on November 24, 1992, to the Department of Environmental Regulation for a permit to construct three packaged boilers at their facility in Jacksonville, Duval County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes and Florida Administrative Code (F.A.C.) Chapters 17-212 and 17-4. The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

Pursuant to Section 403.815, Florida Statutes and Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

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

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

The Petition shall contain the following information;

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

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

of the Department's action or proposed action;

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

(d) A statement of the material facts disputed by Petitioner,

if any;

- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this

proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399

904-488-1344

### CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 4-2-95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

Date

### Copies furnished to:

J. Cole, NED

R. Roberson, BESD

J. Bunyak, NPS

D. Buff, KBN

B. Collum, GEPD

C. Hurd, SKC

R. Donelan, OGC

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF INTENT TO ISSUE PERMIT

The Department of Environmental Regulation gives notice of its intent to issue a permit to Seminole Kraft Corporation, 9469 East Port Road, Jacksonville, Florida 32229 to construct three packaged boilers at their facility in Jacksonville, Duval County, Florida. A determination of Best Available Control Technology (BACT) was required. No PSD Class I or II increments are consumed by this project. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by

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

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

Department of Environmental Regulation Bureau of Air Regulation 111 South Magnolia Drive Tallahassee, Florida

Department of Environmental Regulation
Northeast District
-7825 Baymeadows Way
Jacksonville, Florida 32256-3767

Duval County Air Quality Division 421 West Church Street, Suite 412 Jacksonsville, Florida 32202-4111

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

Further, a public hearing can be requested by any persons. Such requests must be submitted within 30 days of this notice.

# Technical Evaluation and Preliminary Determination

Seminole Kraft Corporation Duval County Jacksonville, Florida

Three Gas-Fired Packaged Boilers Permit Number: AC 16-222359 PSD-FL-198

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

March 31, 1993

### Application

### A. Applicant

Seminole Kraft Corporation 9469 East Port Road Jacksonville, Florida 32229

### B. Project/Location/Classification

The Department received a complete application on February 10, 1993, for a permit to construct three packaged boilers at the applicant's facility in Jacksonville, Duval County, Florida. The applicant's recycled fiber paper mill facility (SIC Code 2621) is located at 9469 East Port Road. UTM coordinates of the site are 441.8 km E and 3,365.6 km N.

### II. Project Description

Seminole Kraft (SKC) proposes to install three 125,000 lbs/hr packaged steam boilers at their recycled fiber paper mill facility in Jacksonville, Florida, while contemporaneously shutting down several boilers and pulping facilities. SKC's project is tied in with the coal-fired Cedar Bay Cogeneration Project (CBCP), formerly known as AES Cedar Bay, by way of an agreement for SKC to receive a major portion of their process steam from the adjacent CBCP facility. Plans call for the CBCP facility to begin operation in early 1994. SKC requires that the three new packaged boilers be sized to provide enough steam to operate their largest paper machine independently of the CBCP facility during periods when CBCP does not operate.

SKC's conversion to a 100% recycled fiber paper mill was completed in 1992 by shutting down all kraft mill facilities processing virgin wood pulp. The equipment involved in the contemporaneous shutdowns is listed below:

Equipment Recovery Boiler 1	Date Shutdown September '92	Date to be Shutdown
Recovery Boiler 2 Recovery Boiler 3		<b>-</b>
Smelt Dissolving Tank 1	11	~
Smelt Dissolving Tank 2	11	~
Smelt Dissolving Tank 3		-
Lime Kiln 1	11	. <del></del>
Lime Kiln 2	11	
Lime Kiln 3	n	· <del>_</del>
Slaker No. 3	n	_
Bark Boiler 1	-	Early 1994*
Bark Boiler 2	-	~ <sub>II</sub>
Power Boiler 1	-	11
Power Boiler 2	_	11
Power Boiler 3	-	

\*These boilers are required to be taken out of service under provisions of the site certification for CBCP, with creditable emission reduction going to CBCP.

### III. Emissions

SKC submitted their application in November 1992, proposing to fire No. 2 fuel oil, with natural gas backup, as they had not been able to obtain a firm natural gas contract. Since then, SKC has obtained a contract for natural gas. Firing of fuel oil as originally proposed would result in emissions exceeding PSD significant rates for sulfur dioxide and beryllium, after applying contemporaneous emission reductions from the shutdowns listed above. Filing an application for oil firing triggered application of the Prevention of Significant Deterioration (PSD) rule, thus requiring a determination of Best Available Control Technology (BACT). This is discussed in the rule applicability section. Tabulated below are the emission credits and the actual emissions after application of BACT:

### Contemporaneous Emissions Credit (TPY)

Source	co	PM/PM <sub>10</sub>	SO <sub>2</sub>	NOx	voc	TRS	H2SO4
-RB #1	1118.5	107.8	3.7	117.5	114.3	7.2	9.5
RB #2	1169.8	156.0	2.8	129.0	185.0	12.3	19.9
RB #3	468.5	129.7	1.2	139.5	36.6	14.0	13.9
LK #1	1.4	3.8	0.1	9.0	2.1	0.2	
LK #2	10.1	21.6	8.5	41.3	19.1	1.7	
LK #3	9.9	19.6	6.7	60.2	18.6	1.4	
SDT #1		22.6	2.9	<u></u> -		1.6	
SDT #2		23.8	2.8			1.8	
SDT #3		36.9	2.9			1.6	
Slaker	#3	0.9					
Totals:	2778.2	522.7	31.6	496.5	375.7	41.8	43.3

### Future Emissions (TPY) \*

Source	CO	PM/PM <sub>10</sub>	SO <sub>2</sub>	NOx	VOC	TRS	H2SO4
PB #1	184.2	3.6	2.5	103.4	0.7		negl.
PB #2	184.2	3.6	2.5	103.4	0.7		negl.
PB #3	184.2	3.6	2.5	103.4	0.7		negl.
Totals:	552.6	10.8	7.5	310.2	2.1		negl.
Net Change:	-2225.6	-511.9	-24.1	-186.3	-373.6	-41.8	-43.3
PSD Level:	100	25/15	40	40	40	10	7

\*See BACT Determination for details on calculation of future emissions.

Future emission were determined on the basis of fuel consumption levels contemplated during CBCP's site certification proceedings; namely, that the SKC packaged boilers would be

permitted to operate such that when the SKC facility is importing 380 M lbs/hr of steam (heat equivalent of 456 MMBtu/hr) from CBCP, the SKC packaged boilers would produce 260 M lbs/hr for a total SKC steam production of 640 M lbs/hr. This steam production level is the basis of the modeling that was done for the CBCP facility and therefore is the basis for the allowable emission levels in the Department's proposed permit for the SKC packaged boilers. M lbs steam/hr is equivalent to a peak fuel consumption level of 354 MMBtu/hr when SKC is receiving 380 M lbs/hr of steam from the Thus, the SKC boilers, although sized for a total capacity of 524 MMBtu/hr (174.7 MMBtu/hr each), will only be allowed to fire up to 354 MMBtu/hr total, unless the CBCP facility delivers less than 380 M lbs/hr. In that event, the SKC packaged boilers would be allowed to make up the deficit in steam production up to a maximum of 524 MMBtu/hr when the CBCP facility is not providing SKC with any steam. This means that SKC will be allowed to utilize the full capacity of the three packaged boilers (524 MMBtu/hr) only when the CBCP facility is down. This level of production will provide sufficient steam for SKC to operate their largest paper machine during periods when CBCP does not operate.

### IV. Rule Applicability

The proposed project is subject to preconstruction review in accordance with Chapter 403 of the Florida Statutes and Florida Administrative Code (F.A.C.) Chapters 17-210 through 297 and 17-4. The proposed facility will be located in an area classified as attainment for all regulated pollutants except ozone for which the area is designated as a transitional nonattainment area. The federal new source performance standards under 40 CFR Subpart Db (standards of performance for Industrial Steam Generating Units) apply for NOx control. Also, F.A.C. Rule 17-296.406, Fossil Fuel Steam Generators, applies to these boilers requiring a BACT analysis for particulate matter and sulfur dioxide.

As originally filed, the application is subject to the provisions of F.A.C. Rule 17-212.400, Prevention of Significant Deterioration (PSD), because the proposed oil-firing emissions, after applying offsets, would exceed PSD-significant levels for sulfur dioxide and beryllium. Upon applying Best Available Control Technology (BACT) required under the PSD rule, the firing of natural gas as the primary fuel resulted in emissions that are well below PSD-significant levels. This is somewhat unusual in that the application of BACT has resulted in the project netting out of PSD significance. Yet, the proposed facility remains a PSD project since, without application of BACT, the PSD-significant levels would be exceeded.

### V. AIR QUALITY IMPACT ANALYSIS

The applicant proposed emissions of sulfur dioxide and beryllium in PSD-significant amounts. The applicant submitted the air quality analysis required by the PSD regulations for these two pollutants. The applicant's SO<sub>2</sub> analysis was based on the proposed full time use of fuel oil with a maximum sulfur content of 0.5 percent (average 0.3 percent). The Department's BACT determination requires the use of natural gas instead of fuel oil as a primary fuel. This substantially restricts the emissions of both pollutants. Re-calculation of the emissions from the proposed project after the application of BACT shows that projected emissions of all pollutants are below PSD-significant amount.

Modeling results for full time fuel oil firing show predicted violations of the annual and 24-hour SO<sub>2</sub> ambient air quality standards (AAQS) of 60 ug/m<sup>3</sup> and 260 ug/m<sup>3</sup> and also of the 24-hour PSD Class II increment of 91 ug/m3. All of these predicted violations occur at a distance of 4.0 to 11.0 km southwest and west of Seminole Kraft. With the applicant's proposed use of 0.5 percent (maximum) sulfur fuel oil, there is one predicted violation of the 24-hour AAQS where Seminole Kraft and Cedar Bay combined contribute significantly to the violation. However, the Department's BACT determination restricts Seminole Kraft to the use of fuel oil containing a maximum sulfur content of only 0.05 percent as an emergency fuel (800 hours or less per year) when natural gas is unavailable. Modeling results based on the use of 0.05 percent fuel oil show that Seminole Kraft and Cedar Bay do not contribute significantly to this violation of the AAQS. Therefore, the Department has reasonable assurance that the proposed project, as described in the report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any AAQS or PSD increment.

### VI. Conclusion

Based on the information provided by Seminole Kraft, the Department has reasonable assurance that the proposed installation, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapters 17-210 thru 297 of the Florida Administrative Code.



### Florida Department of Environmental Regulation

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

Virginia B. Wetherell, Secretary

PERMITTEE: Seminole Kraft Corp. 9469 East Port Road Jacksonville, Florida 32229 Permit Number: AC16-222359 PSD-FL-198

Expiration Date: March 31, 1994

County: Duval

Latitude/Longitude: 30°25'15"N 81°36'00"W

Project: Three Gas-Fired

Packaged Boilers

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-210 through 297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of three 125,000 lbs/hr packaged process steam boilers. The facility is located at 9469 East Port Road, Jacksonville, Duval County, Florida. UTM coordinates of the site are: Zone 17, 441.8 km E and 3,365.6 km N.

Emissions shall be controlled by using clean fuels and good combustion practices.

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

### Attachments are listed below:

- Letter (with proposed gas contract) from Oertel to Pennington (12/3/92).
- Letter from KBN to DER (12/9/92).
- Letter from Georgia DNR to DER (12/10/92).
- Letter from KBN to DER (12/22/92).
- Incompleteness letter from DER to SKC (12/23/92).
- Letter from KBN to DER (12/23/92).
- 7. Second Incompleteness letter from DER to SKC (1/5/93).
- Letter from KBN to DER (1/8/93).
- 9. Letter from EPA to DER (1/15/93).
- 10. Letter from Oertel to DER (1/19/93).
- Third Incompleteness letter from DER to SKC (1/25/93).
- 12. Letter from Oertel to DER (1/29/93).
- 13. Letter from Oertel to DER (1/29/93).
- 14. Completeness letter from DER to SKC (2/10/93).

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Permit Number: AC16-222359
PSD-FL-198

Expiration Date: March 31, 1994

### GENERAL CONDITIONS:

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

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
  - 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
  - 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
  - 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

Permit Number: AC16-222359 PSD-FL-198

Expiration Date: March 31, 1994

### GENERAL CONDITIONS:

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

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

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

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

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

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

Permit Number: AC16-222359 PSD-FL-198

Expiration Date: March 31, 1994

### GENERAL CONDITIONS:

provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - (x) Determination of Best Available Control Technology (BACT)
  - (x) Determination of Prevention of Significant Deterioration
  - (x) Compliance-with New Source Performance Standards (NSPS)
- 14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
  - the date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling or measurements;
  - the dates analyses were performed;
  - the person responsible for performing the analyses;

Permit Number: AC16-222359 PSD-FL-198

Expiration Date: March 31, 1994

### GENERAL CONDITIONS:

- 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 corrected promptly.

### SPECIFIC CONDITIONS:

- 1. The construction and operation of these sources shall be in accordance with the capacities stated in the Technical Evaluation and Preliminary Determination.
- 2. The packaged boilers may be operated continuously (8760 hrs/yr) according to the limits specified in Specific Condition No. 3.
- 3. Only natural gas shall be fired in the boilers except during periods of gas curtailment when No. 2 fuel oil may be fired for no more than 800 hours per year. The maximum total heat input to the three boilers shall not exceed 354 MMBtu/hr unless the adjacent Cedar Bay facility fails to provide the permittee with steam in which case the total heat input shall not exceed 524 MMBtu/hr. In no case shall the total steam production of the three packaged boilers plus the steam imported from the Cedar Bay facility exceed 640,000 lbs/hr.
  - 4. The maximum allowable NOx emissions shall not exceed 0.2 lb/MMBtu, 23.6 lbs/hr, and 103.4 tons/yr per boiler.
  - 5. Sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent by weight. Annual  $SO_2$  emissions shall not exceed 2.5 tons per year per boiler.
  - 6. Visible emissions (VE) shall not exceed 5% opacity during natural gas firing and 10% opacity during fuel oil firing.
  - 7. In accordance with requirements of 40 CFR 60.48(b), a monitoring system (CEMS) for nitrogen oxides shall be installed, operated, and maintained. Also, the natural gas, fuel oil and steam flows (both from the packaged boilers and from the CBCP facility) shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to DER upon request.

Permit Number: AC16-222359 PBD-FL-198

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### **SPECIFIC CONDITIONS:**

8. Before this construction permit expires, the common packaged boiler stack shall be tested and monitored for compliance with the emission limits in Specific Conditions No. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR 60.46b(e)(3). Compliance with  $SO_2$  limits shall be in accordance with 40 CFR 60.49b(r). Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.

- 9. The DER Northeast District office and the RESD (Regulatory and Environmental Services Department) shall be notified at least 30 days prior to the compliance tests. Compliance test results shall be submitted to the DER Northeast District office and the Bureau of Air Regulation office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.
- 10. The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The Regulatory and Environmental Services Division of Jacksonville shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment. This requirement shall operate as a joint and individual requirement to assure common control for purpose of ensuring that all commitments relied on are in fact fulfilled.
  - 11. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
  - 12. An application for an operation permit must be submitted to the Northeast District office and the RESD at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Permit Number: AC16-222359

PSD-FL-198

Expiration Date: March 31, 1994

Virginia B. Wetherell, Secretary

# Best Available Control Technology (BACT) Determination Seminole Kraft Corporation Duval County PSD-FL-198 AC16-222359

The applicant proposes to install three packaged boilers at their recycled fiber paper mill facility in Jacksonville, Duval County, Florida. Each of the three boilers will be sized to provide up to 125,000 lbs/hr of process steam for Seminole Kraft Corporation's (SKC) paper machines. SKC will also receive process steam from the adjacent Cedar Bay Cogeneration Project (CBCP). According to terms of the CBCP Site Certification proceedings, SKC is to be limited to a total steam production of 640,000 lbs/hr which includes 380,000 lbs/hr imported from the CBCP facility. This leaves 260,000 lbs/hr to be produced by the three packaged boilers under normal operating conditions. During periods when CBCP is not operating or operating at reduced rates, SKC will be allowed to make up the difference between the 380,000 lbs/hr and the steam production level that CBCP provides. This is equivalent to a maximum firing rate of 524 MMBTU/hr for all three SKC packaged boilers when the CBCP facility is down.

### Date of Receipt of a Complete Application

February 10, 1993

### BACT Determination Requested by Applicant

SKC's application called for the firing of fuel oil on a full time or as needed basis since a firm natural gas contract had not been obtained at the time of filing. Consequently, the application required a BACT determiniation for SO2 and beryllium since these pollutants would be emitted in amounts exceeding PSD-significant levels. BACT was proposed by the applicant as firing fuel oil with a 0.5 percent maximum sulfur content (0.3 average). Since there are no specific control technologies for beryllium, an uncontrolled beryllium emission level was proposed.

### BACT Determination by the Department

During initial permitting discussions with SKC, the Department indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract. Therefore, the Department's determination of BACT is the use of natural gas for of 7,960-8,760 hours per year and No. 2 fuel oil (0.05% sulfur max.) as backup for the difference of 800 hours per year if natural gas is not available. Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

BACT Seminole Kraft Corp. Page Two

Pollutant	<u>Emission Limits</u>	<u>Basis</u>
NOx	23.6 lbs/hr and 103.4 tons/yr	Subpart Db (0.2 lb/mm BTU)
SO <sub>2</sub>	0.3 lbs/hr and 2.5 tons/yr	BACT (0.05%S)
VE_	Natural Gas - 5% opacity	BACT
VE	No. 2 Fuel Oil - 10% opacity	BACT

### BACT Determination Procedure

In accordance with F.A.C. Rules 17-210 through 297, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available control methods, systems and techniques. In addition, the regulations require that in making the BACT determination the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other State.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

BACT Seminole Kraft Corp. Page Three

### BACT Determination Rationale

BACT review for particulate emissions and sulfur-dioxide are required under F.A.C. Rule 17-296.406. Visible emissions may be regulated as a surrogate parameter for PM/PM<sub>10</sub> and have been established at 5% opacity for natural gas fired boilers (10% opacity for No. 2 fuel oil).

For SO<sub>2</sub> emissions from oil firing, only two alternatives exist that would result in stringent SO<sub>2</sub> emissions; using low sulfur content fuel oil or flue gas desulfurization (FGD). EPA has recognized that FGD technology is inappropriate to apply to these combustion units. Sludge would be generated that would have to be disposed of properly, and there would be greatly increased costs associated with the construction and operation of a FGD system. Finally, there is no information in the literature to indicate that FGD has ever been applied to burning distillate oil. This leaves the use of natural gas and low sulfur fuel oil as backup as the best option for this project. Due to the anticipated availability of very low sulfur oil by October 1993, the Department will required the use of No. 2 fuel oil with 0.05% sulfur by weight as BACT.

### Details of the Analysis May be Obtained by Contacting:

Preston Lewis, P.E., BACT Coordinator Department of Environmental Regulation Bureau of Air Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Recommended by:

C. H. Fancy, P.E., Chief Bureau of Air Regulation	Virginia B. Wetherell, Dept. of Environmental	
1993		1993
Date	Date	

Approved by:

Attachments Available Upon Request