



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

State of Florida
Department of Environmental Protection
Notice of Permit

In the matter of an
Application for Permit by:

DEP File No. AC 54-266676
PSD-FL-226
Putnam County

Mr. Henry Hirschman, General Manager
Georgia-Pacific Corporation
Post Office Box 919
Palatka, Florida 32178-0919

Enclosed is Permit Number AC 54-266676/(PSD-FL-226) and a Best Available Control Technology (BACT) determination for the modification of your Kraft pulp mill located in Palatka, Putnam County, Florida. This permit is issued pursuant to Section 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 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 14 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, Florida 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on 9-21-95 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.

Keri Jober 9-21-95
Clerk Date

Copies furnished to:

Chris Kirts, NED
Jewell Harper, EPA
John Bunyak, NPS
David Buff, NPS

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Is your RETURN ADDRESS completed on the reverse side?

SEND:

- Complete this form and return it to the postmaster.
- Print name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

Following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Henry Nuschman, G.M.
 GA-Pacific Corp
 P O Box 919
 Palatka, FL
 32178-0919

4a. Article Number
 Z 127 632 520

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 9-27-95

5. Signature (Addressee)

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

6. Signature (Agent)

PS Form 3811, December 1991

Thank you for using Return Receipt Service.

Z 127 632 520



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

| | |
|---|----------------|
| Sent to | Henry Nuschman |
| Street and No. | GA-Pacific |
| P.O., State and ZIP Code | Palatka, FL |
| Postage | \$ |
| Certified Fee | |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | |
| Return Receipt Showing to Whom, Date, and Addressee's Address | |
| TOTAL Postage & Fees | \$ |
| Postmark or Date | 9-21-95 |
| | AC 54-266676 |
| | PSD-FL-226 |

PS Form 3800, March 1993

FINAL DETERMINATION

Georgia-Pacific Corporation
Putnam County
Palatka, Florida

Digester Replacement and Pulp Mill Efficiency Improvement Projects

Department Permit No. AC 54-266676
PSD-FL-226

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

September 14, 1995

FINAL DETERMINATION

Georgia-Pacific Corporation
AC 54-266676/PSD-FL-226

The Intent to Issue an air construction permit for Georgia-Pacific Corporation to modify its existing Kraft pulp mill in Palatka, Putnam County, Florida, was distributed on August 2, 1995. The Notice of Intent to Issue was published in The Daily News on August 8, 1995. Copies of the evaluation were available for public inspection at the Department's offices in Jacksonville and Tallahassee.

Written comments on the Department's Intent were submitted by Georgia-Pacific Corporation in a letter dated August 18, 1995. Their comments and the Department's response are discussed below.

The evaluation and proposed permit listed the production limit as 118 tons per hour (TPH) and 1,850 tons per day (TPD) of air dried unbleached pulp (ADUP). The applicant asked that the 1,850 TPD ADUP daily production limit be a monthly average. This request is acceptable to the Department and the project description and Specific Condition No. 10 of the permit have been amended to note that the daily production limit is a monthly average.

The applicant noted that the sulfuric acid emission limit for the TRS incinerator should be 82.2 TPY instead of 82.3 TPY as specified in the Technical Evaluation and proposed permit. The Department agrees with this statement and has changed the limit to 82.2 TPY in Specific Condition No. 5 of the permit.

The applicant noted that the emissions listed in Table 1 of the Technical Evaluation were those proposed by Georgia-Pacific Corporation. For some air pollutants, the allowable emissions established by the Department were lower. For those pollutants, the predicted ambient air impacts will be lower than what is described in the Air Quality Impact Analysis.

The applicant stated that TRS (total reduced sulfur) is not an air toxic. The Department agrees with this statement. TRS is a generic name for a family of chemical compounds containing sulfur. Some of the specific TRS compounds are on the list of hazardous air pollutants.

The applicant requested that the Department clarify whether the term particulate matter, as used in the Technical Evaluation and Preliminary Determination, includes both PM and PM₁₀. It is the Department intent to include all PM, both PM and PM₁₀ which would be measured by EPA Method 5, as the PM limits for the units at this facility. Notes were added to the BACT and Specific Conditions Nos. 4 and 5 to clarify the Department's intent on the PM limits.

A typographical error (misspelled statutes) on the first page of the

permit was corrected.

The applicant asked that it be noted that the sulfur dioxide emission limit for the TRS incinerator in Specific Condition No. 5 is based on the new scrubber achieving 50 percent control efficiency. The basis of this limit was added to Specific Condition No. 5.

The final action of the Department will be to issue the permit as proposed except for the changes noted above.

Best Available Control Technology (BACT) Determination

Georgia-Pacific Corporation
Palatka, Putnam County, Florida
AC54-266676/PSD-FL-226

The applicant, Georgia-Pacific Corporation, located in Palatka, Putnam County, Florida, proposes to modify an existing Kraft pulp mill by replacing two batch digesters, installing a TRS scrubber, adding screen tubes to the recovery boiler, installing a new chip conditioner system, installing a white liquor heating system, and installing an automatic cleaning system on the lime mud filter. The modification has the potential to increase actual pulp production. The increase in emissions that could occur at the production rate requested by the applicant are 300 tons per year (TPY) particulate matter (total PM/PM₁₀), 36.1 TPY sulfur dioxide (SO₂), 626 TPY nitrogen oxides (NOx), 1,022.5 TPY carbon monoxide (CO), 322.2 TPY volatile organic compounds (VOC), 88.5 TPY total reduced sulfur (TRS), 0.04 TPY lead, 0.009 TPY mercury, and 0.0011 TPY beryllium (Be). Sulfuric acid mist emission is estimated to decrease by 12.4 TPY. The increase in the allowable emissions of PM/PM₁₀, NOx, CO, VOC, TRS, and Be are above the significant emission rates and subjects the proposed modification to the Prevention of Significant Deterioration (PSD) new source review regulations. The allowable emissions of these pollutants are set by a Best Available Control Technology (BACT) determination. Only the digester system and recovery boiler, which have physical changes as part of this modification, are subject to this BACT determination.

Date of Receipt of a BACT Application

March 15, 1995

BACT Requested by the Applicant

Air pollution control equipment proposed as BACT for the digester system is a new TRS scrubber and the existing TRS incinerator. For the recovery boiler, the applicant proposes the existing electrostatic precipitator as BACT. The proposed emissions from the digester system and recovery boiler are summarized in the following table:

| Pollutant | Digester System** | | Recovery Boiler | | lbs/hr | TPY |
|------------------|---------------------------------|--------|-----------------|---|--------------|--------|
| | Emission Factor | lbs/hr | TPY | Emission Factor | | |
| PM ₁₀ | Permit | 5.5 | 24.1 | 0.033 gr/dscf @ 8% O ₂ | 83.2 | 364.4 |
| NOx | NG 100 lbs/mmft ³ | 0.76 | 3.33 | | | |
| | M 14 lbs/1000 gal | 1.74 | 7.60 | 100 ppmvd @ 8% O ₂ | 210.6 | 922.4 |
| CO | NG 20 lbs/mmft ³ | 0.15 | 0.66 | 800 (1 hr) + 400 (annual) ppmvd @ 8% O ₂ | 1025.4(hr) | |
| | M 1.9 lbs/1000 gal | 0.24 | 1.03 | | 512.7 annual | 2245.6 |
| VOC | NG 8 lbs/mmft ³ | 0.06 | 0.27 | | | |
| | M 0.5 lbs/1000 gal | 0.06 | 0.27 | 0.52 lb/ton BLS* | 54.6 | 239.1 |
| TRS | NG 5 ppmvd @ 10% O ₂ | 0.12 | 0.53 | | | |
| | M 5 ppmvd @ 10% O ₂ | 0.12 | 0.53 | 11.4 ppmvd @ 8% O ₂ | 17.8 | 78.0 |
| Be | | | | 0.5 lb/E+12 Btu | 6.4 E-4 | 2.8E-3 |

* Black Liquor Solids

** Factor for either Natural Gas (NG) or Methanol (M) Fuel

BACT Determination Procedure

In accordance with Rule 62-212.410, Florida Administrative Code, Best Available Control Technology Determination, Stationary Source-Preconstruction Review, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (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 methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

(a) Any Environmental Protection Agency determination of BACT pursuant to 40 CFR 52.21, 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 unit in question the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically infeasible for the emission unit 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 Pollutant Analysis

DIGESTER SYSTEM

The digester system is a source of TRS. The new source performance standard (40 CFR 60, Subpart BB) allows the TRS gases to be combusted in an incinerator operating at 1200°F with a 0.5 second residence time. The applicant has been using an incinerator meeting these specifications to control the TRS emissions. The applicant is proposing to add a 50% efficient TRS scrubber ahead of the TRS incinerator as part of this modification. Recent BACT determinations have selected incinerators for the control of TRS emissions. The Department is setting BACT for the incinerator at 5 ppmvd @ 10% O₂ when either natural gas or methanol is being burned.

The emissions of the other air pollutants for the digester system that are subject to this BACT determination, primarily the products of combustion, are to be minimized through Good Combustion Practices.

RECOVERY BOILER

The recovery boiler is a source of PM/PM₁₀, NO_x, CO, VOC, TRS, and Be. This unit is now controlled with a 20-year old high-efficiency electrostatic precipitator (ESP) that was rebuilt in 1991. The ESP will control PM/PM₁₀ and Be. Recent BACT determinations have selected ESPs to control emissions from recovery boilers. The PM/PM₁₀ standards in BACT determinations range from 0.021 to 0.033 gr/dscf @ 8% O₂. Test results show the PM/PM₁₀ emissions from this boiler varied from 0.006 to 0.03 gr/dscf @ 8% O₂. The Department is setting the BACT standard at 0.030 gr/dscf @ 8% O₂ (total PM measured by EPA Method 5).

Recovery boilers have relatively low NO_x emissions. Combustion controls technology is used to control NO_x. This includes adjusting the furnace bed height and decreasing the primary air temperature. Furnace design affects actual NO_x emissions. High particulate matter loading in the flue gas creates technical problems which prevent flue gas recirculation (FGR) from being used on a recovery furnace. Catalyst fouling prevent the application of selective catalytic reduction (SCR). Ammonia bisulfate would also cause plugging of the equipment downstream of a selective non-catalytic

reduction (SNCR) system. Neither system is reported to have been used on a recovery boiler. BACT/LAER Clearinghouse document shows BACT emission limits of 75 to 120 ppmvd @ 8% O₂. Actual test results on this furnace show NOx emissions varied from 45 to 65 ppmvd @ 8% O₂. The Department is setting the BACT standard for NOx at 80 ppmvd @ 8% O₂.

CO and VOC emissions are formed during the incomplete combustion of the black liquor which is about 25 percent carbon. Good Combustion Practice is used to control these pollutants. The BACT/LAER Clearinghouse document list BACT determinations for CO of 200-400 ppmvd @ 8% O₂. Test data on this furnace show CO emissions range from 102 to 756 ppmvd @ 8% O₂. BACT determinations for VOC range from 0.048 to 0.095 lbs/MMBtu. Test data on this furnace show VOC emissions range from 0.01 to 0.50 lbs ton black liquor solid (BLS). The Department is setting the BACT standard for CO at 800 ppmvd @ 8% O₂, 3-hour average, and 400 ppmvd @ 8% O₂, 24-hour average. The Department is setting the BACT standard for VOC at 0.30 lbs/ton BLS.

TRS is controlled by the distribution of the combustion air in the furnace. Continuous emissions monitoring data for this furnace shows TRS emissions of up to 11.2 ppmvd @ 8% O₂. The BACT/LAER Clearinghouse document listed limits at 5.0 ppmvd @ 8% O₂. These boilers were subject to the new source performance standard for Kraft pulp mills. The Department is setting the BACT standard for TRS at 11.2 ppmvd @ 8% O₂, 12-hour average, and 7.0 ppmvd @ 8% O₂, 12-month rolling average. The Department will revisit this BACT determination for the 12-month rolling average standard for TRS if it can be shown with a minimum of 6 months actual operation and emission data from the modified boiler that the standard is inappropriate.

Summary of the BACT Determination by the Department

DIGESTER SYSTEM

The Department has determined that the TRS scrubber in combinations with the TRS incinerator is BACT for the digester system. The addition of the scrubber will reduce the potential emissions of TRS to less than the current actual emissions. Considering the recent test data as the incinerator, the Department is setting the BACT determination standard at 5 ppmvd @ 8% O₂. Compliance will be based on scrubber and incinerator operation parameters and emission test by EPA Method 16 or 16A.

RECOVERY BOILER

The Department accepts the use of the existing ESP and Good Combustion Practice as BACT for the recovery boiler.

Based on the recent ESP test data, the Department is setting the PM/PM₁₀ (total PM measured by EPA Method 5) BACT determination standard at 0.030 gr/dscf @ 8% O₂. Visible emissions shall not exceed 20 percent opacity. Compliance shall be determined by EPA

Methods 5 (assuming all PM is PM10) and EPA Method 9.

BACT for Be is set at 0.5 lbs/E+12 Btu. Compliance shall be based on an emission factor established for this unit by EPA Method 103 or 104 as described in 40 CFR 61, Appendix B.

BACT for NOx is 80 ppmvd @ 8% O₂. Compliance shall be determined by EPA Method 7 or 7E.

BACT for CO is 800 ppmvd @ 8% O₂, 3-hour average, and 400 ppmvd @ 8% O₂, 24-hour average. Compliance shall be determined using EPA Method 10.

BACT for VOC is 0.30 lbs/ton BLS. Compliance shall be determined using EPA Method 25 or 25A.

BACT for TRS is 11.2 ppmvd @ 8% O₂, 12-hour average, and 7.0 ppmvd @ 8% O₂, 12-month rolling average. Compliance with the 12-hour standard shall be based on EPA Method 16 or 16A. Compliance with the 12-month rolling average standard shall be based on the TRS continuous emission monitoring records. The Department will reconsider the 12-month rolling average standard if a minimum of 6 months actual operation and emission data from the modified boiler demonstrate it is inappropriate.

Test data shows these standards can be met with the existing ESP.

Details of the Analysis May be Obtained by Contacting:

A. A. Linero, P.E., Administrator, NSR Section
Willard Hanks, Review Engineer
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

Approved by:



C. H. Fancy, P.E., Chief
Bureau of Air Regulation


for Virginia B. Wetherell, Secretary
Dept. of Environmental Protection

September 13, 1995
Date

18 September, 1995
Date



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

AIRS ID 1070005

Permittee:
Georgia-Pacific Corporation
P. O. Box 919
Palatka, FL 32178-0919

Permit Number: AC54-266676
(PSD-FL-226)
Expiration Date: 12/31/96
County: Putnam
Latitude/Longitude:
29°41'00"
81°40'45"
Project: Kraft Pulp Mill
Modification

This permit is issued under the provision of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4 and 62-212, Florida Administrative Code (F.A.C.). 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 and specifically described as follows:

For modification of an existing Kraft pulp mill located north of County Road 216 and west of U.S. Highway 17 near Palatka, Putnam County, Florida. The UTM coordinates of the plant site are Zone 17, 424.0 km E and 3283.4 km N. The modification consists of the replacement of two digesters, adding additional screen tubes to the recovery boiler, installing a new total reduced sulfur (TRS) scrubber ahead of the TRS incinerator, installing a chip conditioner system, installing a white liquor heating system, and installing an automatic cleaning system on the lime mud filter. Allowable production for the facility remains at 118 tons per hour (TPH) air dried unbleached pulp (ADUP) and 1,850 tons per day (TPD) ADUP (monthly average).

Stack parameters for the major units at this facility are shown below:

| Units | Height (ft) | Diameter (ft) | Temperature (°F) | Velocity (FPS) |
|--------------------------------|----------------|------------------|---------------------|-------------------|
| Recovery Boiler No. 4 | 230 | 12.0 | 400 | 63.7 |
| Lime Kiln No. 4 | 131 | 4.4 | 150 | 60.8 |
| Smelt Dissolving Tank No. 4 | 206 | 5.0 | 160 | 21.2 |
| TRS Incinerator | 250 | 3.1 | 500 | 105.1 |
| Tall Oil Plant | 40 | 1.3 | 200 | 40.8 |

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

The emission units shall be constructed (modified) 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:

1. Application received March 15, 1995.
2. KBN letter dated March 27, 1995.
3. DEP letter dated March 29, 1995.
4. KBN letter dated April 13, 1995.
5. KBN letter dated April 17, 1995.
6. Permit Nos. AC54-142282, AC54-142283, AC54-142288, and AC54-142291 with amendments to these permits dated July 18, 1988, July 28, 1989, December 6, 1989, and September 5, 1990.
7. Permit No. AC54-170420
8. Permit No. AC54-192550 (PSD-FL-171)
9. Permit No. AC54-192551 (PSD-FL-171)
10. Permit No. AC54-193841 (PSD-FL-171)
11. Permit No. AC54-108945
12. KBN letter dated July 5, 1995.
13. KBN letter dated July 26, 1995.
14. Georgia-Pacific Corporation's letter dated August 18, 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, 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

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

GENERAL CONDITIONS

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 acknowledgment 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.

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.

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

GENERAL CONDITIONS:

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 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 Rules 62-4.120 and 62-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards (NSPS)

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

GENERAL CONDITIONS:

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
 - The date, exact place, and time of sampling or measurements;
 - The person responsible for performing the sampling or measurements;
 - The dates analyses were performed;
 - The person responsible for performing the analyses;
 - The analytical techniques or methods used; and,
 - The results of such analyses.

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:

General

1. The provisions of the following air construction/operation permits and revisions to those permits, except for the changes noted, are incorporated by reference as conditions of this air construction permit.

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

SPECIFIC CONDITIONS:

Digester System, Multiple Effect Evaporator System, Condensate Stripper System, and TRS Incinerator (AO54-166018)

| Permit Number | Issue Date | Amendment Date(s) | Changes by this Permit |
|---------------|--------------|-------------------|---------------------------|
| AC54-142282 | APR 26, 1988 | JUL 18, 1988 | Replace 2 batch digesters |
| AC54-142283 | | JUL 28, 1989 | |
| AC54-142288 | | DEC 6, 1989 | |
| AC54-142291 | | SEP 5, 1990 | |

Digester System

| Permit Number | Issue Date | Amendment Date(s) | Changes by this Permit |
|---------------|--------------|-------------------|---|
| AC54-170420 | JAN 26, 1989 | None | Replace 2 batch digesters Specific Condition (SC) 5- SO ₂ emission standards |

No. 4 Recovery Boiler (AO54-209650)

| Permit Number | Issue Date | Amendment Date(s) | Changes by this Permit |
|-----------------------------|--------------|-------------------|---|
| AC54-192550 (PSD-FL-171) | JUN 12, 1991 | None | SC 3- PM/PM ₁₀ , NO _x , CO, VOC, and visible emission standards SC 4- TRS emission standards SC 6- SAM emission standards |

No. 4 Lime Kiln (AO54-209858)

| Permit Number | Issue Date | Amendment Date(s) | Changes by this Permit |
|-----------------------------|--------------|-------------------|------------------------|
| AC54-192551 (PSD-FL-171) | JUN 12, 1991 | None | No Change |

Smelt Dissolving Tanks (AO54-209650)

| Permit Number | Issue Date | Amendment Date(s) | Changes by this Permit |
|-----------------------------|--------------|-------------------|------------------------|
| AC54-193841 (PSD-FL-171) | JUN 12, 1991 | None | No change |

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

SPECIFIC CONDITIONS:

Tall Oil Plant (AO54-209098)

| Permit Number | Issue Date | Amendment Date(s) | Changes by this Permit |
|---------------|-------------|-----------------------------|------------------------|
| AC54-108945 | FEB 6, 1987 | JUN 20, 1987 JAN 1, 1988 | No change |

Construction

2. The construction/modifications authorized by this permit are:
 - A. Replace two of the existing thirteen 4,000 ft³ digesters with two 4,900 ft³ digesters.
 - B. Install additional screen tube modules (bundles of 10 individual tubes) on 12 inch centers around the existing 15 screen tube modules in No. 4 Recovery Boiler.
 - C. Install a total reduced sulfur (TRS) packed tower scrubber ahead of the existing TRS incinerator that is designed to remove 50 percent of the TRS.
 - D. Install a new chip conditioner system consisting of two horizontal steel rolls that turn at a low rpm to crush or fissure the chips.
 - E. Installation of a white liquor heating system.
 - F. Install an automatic cleaning system on the lime mud filter.

Federal Requirements

3. The permittee shall comply with all applicable requirements for the digester system in 40 CFR 60, Subpart BB- Standards of Performance for Kraft Pulp Mills.

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

SPECIFIC CONDITIONS:

Emission Limitations

4. Maximum emissions from the No. 4 Recovery Boiler shall not exceed any of the following:

| Pollutant | Emission Factor | lbs/hr | TPY |
|----------------------|---|-----------------|--------|
| PM/PM _{10a} | 0.030 gr/dscf @ 8% O ₂ | 75.6 | 331.1 |
| SO ₂ | 75 ppmvd @ 8% O ₂ | 109.9 | 481.4 |
| NO _x | 80 ppmvd @ 8% O ₂ | 168.5 | 738.1 |
| CO | 800 ppmvd @ 8% O ₂ (3-hr) 400 ppmvd @ 8% O ₂ (24-hr) | 1025.4 512.7 | 2245.6 |
| VOC | 0.30 lb/ton BLS | 31.5 | 138.0 |
| SAM | 0.81 ppmvd | 3.20 | 14.2 |
| TRS* | 7.0 ppmvd @ 8% O ₂ | 10.9 | 47.7 |
| Beryllium | 0.5 lb/E+12 Btu | 6.4E-4 | 2.8E-3 |

^aTotal PM measured by EPA Method 5

* 12-month rolling average. Maximum of 11.2 ppmvd @ 8 percent oxygen and 17.5 lbs/hr is maximum allowable TRS emissions during any 12 hour period.

Visible emissions shall not exceed 20 percent opacity (BACT).

5. Maximum emissions from the TRS incinerator controlling the emissions from the digester system, multi-effect evaporator systems, and condensate stripper system shall not exceed any of the following:

Natural Gas or Methanol Fuel

| Pollutant | Emission Factor | lbs/hr | TPY |
|----------------------|--|-------------|--------|
| PM/PM _{10a} | permit | 5.5 | 24.1 |
| SO ₂ | 5.085 lbs/ton ADUP | 383 (24-hr) | 1677.5 |
| SAM | 4% of SO ₂ as SO ₃ | 18.8 | 82.2 |
| TRS | 5 ppmvd @ 10% O ₂ | 0.12 | 0.53 |

Note: ^aTotal PM measured by EPA Method 5

^bbased on 50% TRS control efficiency of the scrubber

Visible emissions shall not exceed 5 percent opacity except 20 percent opacity is allowed for 3 minutes in any 1 hour period (Rule 62-296.401(1), F.A.C.).

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

SPECIFIC CONDITIONS:

Compliance Determination

6. Except for Beryllium (Be), TRS, and SAM, compliance tests for all emission standards for the No. 4 Recovery Boiler listed in Specific Condition No. 4 shall be conducted once each Federal fiscal year. Compliance with the emission standards shall be based on the EPA reference methods as described in 40 CFR 60, Appendix A, except as noted below. If all particulate matter is assumed to be PM₁₀, compliance may be based on EPA Method 5. The initial and annual compliance tests for sulfuric acid mist emissions shall be conducted using EPA Method 8 or NCASI Method 106 for two years from the date of issuance of this permit. At the end of this time, appropriate emission testing methodology and, if supported by test data, revised SAM emission limits shall be established by the Department. Be tests shall be conducted initially and every 5 years thereafter. Compliance with the 12-hour TRS standard shall be determined annually using EPA Method 16 or 16A. Compliance with the 12-month rolling average TRS standard shall be based on the TRS continuous emissions monitor data.

7. Compliance tests for the PM/PM₁₀ standard (total PM measured by EPA Method 5) for the TRS Incinerator listed in Specific Condition No. 5 shall be conducted prior to the expiration date of this permit and every 5 years thereafter. Compliance with the SO₂ and visible emissions standards shall be determined annually using EPA Methods 6C and 9 as described in 40 CFR 60, Appendix A. The unit will be assumed to be in compliance with the TRS standard provided the incinerator operates at a minimum temperature of 1,200 °F and has a minimum retention time of 0.5 seconds. The initial and annual compliance tests for sulfuric acid mist emissions shall be conducted using EPA Method 8 or NCASI Method 106 for two years from the date of issuance of this permit. At the end of this time, appropriate emission testing methodology and, if supported by test data, revised SAM emission limits shall be established by the Department.

8. Particulate matter and visible emissions tests shall be conducted concurrently. The test report submitted to the Department's Northeast District office within 45 days of completion of the last test run.

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
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SPECIFIC CONDITIONS:

Monitoring

9. The Department's Northeast District office shall be notified in writing at least 15 days in advance of any emission test

required by this permit. Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then emission units may be tested at less than 90 percent of the maximum operating rate allowed by the permit. In this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.

Operation Limitations

10. Pulp production capacity shall not exceed 118 TPH ADUP and 1,850 TPD ADUP (monthly average).

11. The total reduced sulfur (TRS) incinerator shall operate at a minimum temperature of 1,200°F with a minimum residence time of 0.5 seconds. Scrubber liquid flow and pressure of the TRS scrubber shall be maintained at or above the level documented to remove at least 50 percent of the TRS air pollutant to the scrubber.

12. Black liquor solids (BLS) input to No. 4 Recovery Boiler shall not exceed 210,000 lbs/hr and 5.04×10^6 lbs/day.

Record keeping and Reporting Requirements

13. An annual operation report shall be submitted to the Department's Northeast District office by March 1 of each year pursuant to Rule 62-210.370(2), F.A.C.

14. 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. (Rule 62-4.090, F.A.C.)

PERMITTEE:
Georgia-Pacific Corporation

PERMIT NUMBER: AC54-266676
(PSD-FL-226)

SPECIFIC CONDITIONS:

15. A timely application for a Title V permit to operate shall be submitted to the Northeast District office by the date specified in Chapter 62-213, F.A.C.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


for Virginia B. Wetherell, Secretary

Florida Department of
Environmental Protection

Memorandum

WILLARD

To: Virginia B. Wetherell
Thru: Kirby Green
From: Howard L. Rhodes *HLR*
Date: September 13, 1995
Subject: Georgia-Pacific Corp. Modification
Permit No. AC 54-26676/PSD-FL-226

Attached for the Secretary's approval and signature is the air construction permit and the Best Available Control Technology (BACT) determination for the proposed modification to Georgia-Pacific Corp.'s Kraft pulp mill located in Palatka, Putnam County, Florida.

The modification involves replacement of digesters Nos. 11 and 12 with more modern and larger units, adding screen tubes to the No. 4 Recovery Boiler, and other minor plant alterations. The modifications and improvements result in a small increase in production and emissions. However, due to the federal Prevention of Significant Deterioration (PSD) rules, a review of Best Available Control Technology (BACT) was required. The control equipment consist of a scrubber and an incinerator to process digester off-gases and an electrostatic precipitator and good combustion practice on the recovery boiler. We determined that the BACT review for this facility conducted in 1991 (following another improvement) is still applicable except that some of the emission limits were adjusted consistent with the demonstrated capability of the control equipment.

The only comments received during the public notice period were from the applicant. They resulted in minor corrections to the proposed permit and BACT determination as discussed in the Final Determination. I recommend your approval of the permit and BACT determination.

Attachment

HLR/wh/t

Kirby
we'll have delegation letters
for these permits done
soon. *Howard*
9/14