

Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Henry Hirschman, General Manager Georgia-Pacific Corporation Post Office Box 919 Palatka, Florida 32078-0919

April 29, 1988

Enclosed are permits Nos. AC 54-142282, 54-142283, 54-142288 and 54-142291, for Georgia-Pacific Corporation to construct a No. 3 digesting accumulator and improve the turpentine condenser system for the batch digester system; construct a pre-evaporator stage for the multiple effect evaporation system; construct a condensate stripper system; construct a total reduced sulfur (TRS) incinerator; and construct a noncondensable gas handling system to convey emissions to the TRS incinerator. The action is part of a plan to comply with the TRS Rules adopted on March 21, 1985. The project will be located at Georgia-Pacific Corporation's kraft pulp mill near Palatka, Putnam County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to these permits has the right to seek judicial review of these permits 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 these permits are filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality Management

Copy furnished to:

William Stewart, NE Dist. David Buff, P.E., KBN Vernon Adams, Georgia-Pacific

BEST AVAILABLE COPY



Florida Department of Environmental Regulation

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

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DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

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C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality Management

Dist.

David Dull, r.c., TBN

Vernon Adams, Georgia-Pacific

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY

PERMITTEE: Georgia-Pacific Corporation P. O. Box 919 Palatka, Florida 32078-0919 Permit Numbers: AC 54-142282 AC 54-142283 AC 54-142288 AC 54-142291

Expiration Date: Sept. 9, 1989 County: Putnam

Latitude/Longitude: 29° 41' 00" N 81° 40' 45" W

Project: Construction of No. 3
Digesting Blow heat Accumulator;
Pre-Evaporator Stage for No. 1,
2, 3, and 4 Multiple Effect
Evaporator Systems with Concentrator Stage; NSPS Condensate
Stripper System; TRS Incinerator; and Noncondensable Gas
Handling System

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

The construction of a new No. 3 digesting blow heat accumulator as a replacement for No. 1 and No. 2 digesting accumulators. The construction of improvements to the turpentine condenser system. The construction of a pre-evaporator (blow heat evaporator) stage that will precede the No. 1, 2, 3, and 4 multiple effect evaporators which are followed by a concentrator stage—the multiple effect evaporation system in these permits. The construction of a steam condensate stripper system subject to 40 CFR 60. The construction of a TRS incinerator and a noncondensable gas (NCG) handling system to convey all air pollutant emissions from the digester system, multiple effect evaporation system, and condensate stripper system to the TRS incinerator.

The permit numbers are assigned as follows: AC 54-142282, Digester System; AC 54-142283, Multiple Effect Evaporation System; AC 54-142288, Condensate Stripper System; and, AC 54-142291, TRS Incinerator.

The modification shall be in accordance with the attached permit application except as otherwise noted under the General Conditions and Specific Conditions set forth in this permit.

Permit Number: AC 54-142282

54-142283

54-142288

54-142291

Expiration Date: Sept. 9, 1989

GENERAL CONDITIONS:

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

- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
- 13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - (x) Compliance with New Source Performance Standards.
 (AC 54-142288)
- 14. The permittee shall comply with the following monitoring and record keeping requirements:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

Permit Number: AC 54-142282

54-142283

54-142288

54-142291

Expiration Date: Sept. 9, 1989

GENERAL CONDITIONS:

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

 The sources are permitted to operate continuously (i.e., 8760) hrs/year).

40 CFR. 60.283 (a)

2. The emissions from the digester system (consisting of 13 digester systems); the multiple effect evaporation system (7-2,600(4)) (consisting of 4 multiple effect evaporator systems); and the (c) 1. a. NSPS condensate stripper system shall be collected and incinerated in the TRS incinerator. Note that each digester system includes the turpentine condenser system, blow heat accumulator etc.; and that each multiple effect evaporator

INCINERATOR I5 A SEPARATE SOURCE FOR WHICH THERE' IS NOTA SPECIFIC, STANDARD IN

40 CFR 60,282

8 40 CFR 60, 2834

17-2,600(4)(1)6. Applies

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Page 6 of 11 10:11 02 un lessi

40 CFR 60.283 (a)(1)(i11) Thegases are combusted with other waste Separ sort device, is combused in a line kilo or recevery furnace not sub-Ject to the provisions of this subpact and are subjected to a minimum temperature of 1200°F for at least as second.

Permit Number: AC 54-142282

54-142283

54-142288

54-142291

Expiration Date: Sept. 9, 1989

SPECIFIC CONDITIONS:

system includes the concentrator, the pre-evaporator, hotwells, etc. Actual mass emissions from each system shall be determined prior to and after any future changes, meaning those changes to the permitted systems not specifically authorized by these permits.

- 3. TRS emissions from the TRS incinerator shall not exceed 5 ppmv on dry basis at standard conditions corrected to 10% oxygen as a 12-hour average. Mass TRS emissions from the TRS incinerator shall exceed neither 0.12 lb/hr nor 0.53 ton/year. The mass TRS emissions are the maximum permitted aggregate total mass emissions allowed for the permitted sources. TRS emissions shall be determined by EPA Methods 1, 2, 3, and either 16 or 16A. No objectionable odor shall be emitted from the TRS incinerator.
- 4. Particulate emissions from the TRS incinerator shall not exceed 0.08 grain/dry standard cubic foot corrected to 50% excess air. Particulate emissions from the TRS incinerator shall exceed neither 2.44 lbs/hour nor 10.69 tons/year. Particulate emissions shall be determined by EPA Methods 1, 2, 3, and 5.
- 5. SO_2 emissions from the TRS incinerator shall exceed neither 1200 lbs/hr nor 3434 tons/year. SO_2 emissions shall be determined by EPA Methods 1, 2, 3, and 6.
- The following operation rates shall not be exceeded. These operation rates shall be continuously monitored and recorded.
- a. The maximum operation rate of the digester system (AC 54-144282) shall exceed neither 235,970 lbs of air dried unbleached pulp (ADUP)/hour nor a 24-hr average of 154,167 lbs of ADUP/hr. The maximum 24-hr average operation rate is based on the nominal 24-hour average input of 291,417 lbs of dry wood chips/hour, 566,501 lbs of white liquor/hr, and 167,078 lbs of black liquor/hour; and the output of 238,958 lbs of dry black liquor solids (BLS)/hr and 932 lbs of crude sulfate turpentine/hour.
- b. The maximum operation rate of the multiple effect evaporation system (AC 54-142283) shall not exceed 259,121 lbs of dry BLS/hour at the concentrator outlet. The maximum operation rate is based on a nominal input of 238,958 lbs of dry BLS/hr to the pre-evaporator stage of evaporation; 40,208 lbs of dry

17-2,600

Permit Number: AC 54-142282

54-142283

54-142288

54-142291

Expiration Date: Sept. 9, 1989

SPECIFIC CONDITIONS:

BLS/hour to the No. 1 multiple effect evaporators; 71,482 lbs of dry BLS/hour to each the No. 2 and No. 3 multiple effect evaporators; 75,949 lbs of dry BLS/hour to the No. 4 multiple effect evaporators; and 259,121 lbs of dry BLS/hour to the concentrator stage of evaporation.

- The maximum operation rate of the condensate stripper system (AC 54-142288) shall exceed neither 681 lbs of methanol/hour nor a 24-hour average of 446 lbs of methanol/hour. maximum 24-hour average operation rate is based on the nominal input of 45,181 lbs of pre-evaporator effect condensate/hour; 20,016 lbs of turpentine condensate/hour; 6.520 lbs of miscellaneous source condensate/hour; and, 16,200 lbs of steam/hour.
- 7. The following hourly operation rate and fuel input rates to the TRS incinerator (AC 54-142291) shall not be exceeded. The maximum hourly inputs of fuels shall be continuously monitored and recorded.
- The total maximum hourly heat input due to methanol and natural gas either singularly or in combination shall not exceed 8.0 million Btu/hr.
- Natural gas with a sulfur content not to exceed 0.1% by weight may be used during periods of startup, shutdown, and malfunction providing the maximum hourly quantity does not exceed 7,620 cubic feet (60°F and 14.7 psia)/hour. Natural gas may also be used as a supplemental fuel and the total heat input due to all fuels does not exceed that allowed by Specific Condition No. 7.a.
- c. Methanol with a sulfur content not to exceed 0.001% by weight may be used providing the maximum hourly quantity does not exceed 124 gallons/hour and the total heat input due to all fuels does not exceed that allowed by Specific Condition No. 7.a.
- 8. All TRS gases burned in the TRS incinerator shall be subjected to a minimum temperature of at least 1200°F for at least 0.5 second. A device to continuously monitor and record combustion temperature at the point of incineration shall be installed pursuant to all applicable requirements of 40 CFR 60.284(b)(1).

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LNOTE IMPLEMENTS NSPS

REQUIREMENTS APPLICABLE

TO THE MSPS CONDENSATE

STRIPPER. FIRST SENTENCE MERELY CLARIFIES THAT PROVISION OF 40CFR 60.283 (WICI)(III) IS TO BE MET.

NEXT SENTENCE IMPLEMENTS CONTINUOUS MONITORING

REQUIREMENTS APPLICABLE TO THE NSPS CONDENSATE STRIPPED

Permit Number: AC 54-142282

54-142283

54-142288 54-142291

Expiration Date: Sept. 9, 1989

SPECIFIC CONDITIONS:

9. Excess emissions of TRS from the TRS incinerator shall be reported and evaluated pursuant to FAC Rule 17-2.710(4). For the purposes of this Specific Condition the excess emissions to be reported shall be those defined by 40 CFR 60.284(c)(3)(ii).

- 10. All excess emissions from the digester system the multiple effect evaporation system, the condensate stripper system, the noncondensable gas handling (NCG) system, and the TRS incinerator shall be subject to the applicable requirements of FAC Rules 17-2.240, 17-2.250, 17-2.600(4)(c)l.c., and 17-2.130. The required contingency plan shall be submitted to the DER Northeast District office no later than June 11, 1989.
- 11. All continuous monitoring and recording systems shall be regularly calibrated and maintained pursuant to written procedures and schedules recommended by the instrument manufacturer.
- 12. The TRS incinerator shall be equipped with the point source sampling facilities required by FAC Rule 17-2.700. Point source compliance testing shall be conducted with all sources operating at 90 to 100 percent of the operation rates allowed by Specific Condition Nos. 6 and 7. All point source emission tests shall be conducted using the applicable methods and procedures in FAC Rule 17-2.700.
- 13. Compliance testing and continuous monitoring system certification shall be in accordance with the provisions of 40 CFR 60. Initial compliance testing, certification, and calibration shall be completed not later than May 12, 1989. Compliance tests shall be conducted annually, thereafter. The compliance test reports shall include all information required by FAC Rule 17-2.700(7). Notification of testing shall be furnished to the DER Northeast District office.
- 14. If the permittee wishes to retain the existing source designation of the multiple effect evaporation system (AC 54-142283), the permittee shall demonstrate to the DER through emission testing that the installation of the pre-evaporation stage will neither result in increased mass emissions of TRS to the atmosphere nor the noncondensable gas handling system. If the permittee does not elect to test the multiple effect evaporation system pursuant to this specific condition and submit

Permit Number: AC 54-142282

54-142283

54-142288

54-142291

Expiration Date: Sept. 9, 1989

SPECIFIC CONDITIONS:

the test report required by FAC 17-2.700(7) by June 11, 1989, the multiple effect evaporation system shall be a designated federal NSPS source pursuant to 40 CFR 60, Subpart BB. If the ducts are at least 12 inches in diameter, TRS mass emissions shall be determined by EPA Methods 1, 2, 3, and either 16 or 16A. If the ducts are less than 12 inches in diameter TRS mass emissions shall be determined by EPA Methods 2A, 3, and either 16 or 16A. Each test shall consist of 3 runs.

- 15. The digester system, multiple effect evaporation system, condensate stripper system, NCG system, and TRS incineration system shall be constructed, operated, and maintained pursuant to all applicable provisions of Chapter 403, FS; FAC Chapters 17-2 and 17-4; and federal regulations.
- 16. For the purposes of future permits and PSD determinations, the mass emissions of pollutants listed in Table 500-2 and the associated emission changes are:

Compliance

Pollutant	Pre-		Post-		Changes	
	lbs/hrl	T/Y2	lbs/hrl	T/Y^2	lbs/hrl	T/Y2
Particulate			2.4	10.7	+2.4	+10.7
TRS3	637.5	1824.3	0.1	0.5	-637.4	-1823.8
502			1200	3433.9	+1200	+3433.9
NOx			1.5	6.8	+1.5	+6.8
CO			0.4	1.7	+0.4	+1.7
VOC			0.1	0.3	+0.1	+0.3

¹ Based on maximum 3-hour estimate.

17. Applications for operation permits with the appropriate fees, test results, and other data shall be submitted to the DER Northeast District office within 30 days after the initial compliance testing is completed, but not later than June 11, 1989.

²Based on maximum daily estimate.

³Based on information supplied by the company that the TRS gases emitted by the pre-evaporators and condensate stripper were previously emitted to the air.





Florida Department of Environmental Regulation

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

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

July 18, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Henry Hirschman, General Manager Georgia-Pacific Corporation Post Office Box 919 Palatka, Florida 32078-0919

Dear Mr. Hirschman:

Re: Amendments to Construction Permits Nos. AC 54-142282, -142283, -142288, and -142291--Specifically to Construction Permit No. AC 54-142282 for the Digester System.

The Department received Mr. Adams' request for an amendment to the above referenced construction permits on June 13, 1988. Pursuant to your request the following changes have been made:

Specific Condition No. 6.a.:

From: The maximum operation rate of the digester system (AC 54-144282) shall exceed neither 235,970 lbs of air dried unbleached pulp (ADUP)/hour nor a 24-hr average of 154,167 lbs of ADUP/hr. The maximum 24-hr average operation rate is based on the nominal 24-hour average input of 291,417 lbs of dry wood chips/hour, 566,501 lbs of white liquor/hr, and 167,078 lbs of black liquor/hour; and the output of 238,958 lbs of dry black liquor solids (BLS)/hr and 932 lbs of crude sulfate turpentine/hour.

To: For testing purposes and NSPS applicability purposes the maximum production rate of the digester system (AC 54-142282) will be 118 tons of air dried unbleached pulp (ADUP)/hr. Test for compliance will be performed with the control device (incinerator) operating and with the digester system operating as near the maximum production rate as possible, but in no case shall the operating rate of the digesters be less than 85% of the maximum operation rate when testing. For PSD purposes the maximum production rate for the digester system (AC 54-142282) will be 1850 tons of ADUP/day based on a nominal utilization rate of 291,417 pounds dry wood chips/hour and 566,501 pounds of white liquor/hour and 167,078 pounds of black liquor/hour.

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Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary

July 28, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Henry Hirschman General Manager Georgia-Pacific Corporation P. O. Box 919 Palatka, Florida 32078-0919

RE: Construction Permits Numbers AC 54-142282, AC 54-142283, AC 54-142288, AC 54-142291 for the Batch Digester System, the Multiple Effect Evaporation System, the Condensate Stripper System, and the TRS Incinerator, Respectively

The Department has received and reviewed Georgia-Pacific's July 24, 1989, petition for an extension of the expiration dates for the above referenced permits. The Department grants the extension of time with the understanding that none of the compliance dates for the affected sources will be extended by this action. The applicable compliance dates are set forth in Part IX of F.A.C. Chapter 17-2 as well as the above referenced permits.

The following shall be changed and added to the permits:

Expiration Date Change:

From: September 9, 1989 To: March 9, 1990

Attachments to be Added:

12. Georgia-Pacific Corporation's petition for an extension of time, dated July 24, 1989, and received July 24, 1989.