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Palatka Pulp and Paper Operations
Consumer Products Division

P.O. Box 919 Palatka, FL 32178-0919 (386) 325-2001

BUREAU OF AIR REGULATION May 29, 2003

Mr. A. A. Linero, P.E. State of Florida Department of Environmental Protection 2600 Blair Stone Road – Mail Station 3551 Tallahassee, Florida 32399-2400

RE: Georgia Pacific Corporation Palatka Operations

MACT II Air Permit Application

Dear Mr. Linero:

Please find enclosed the MACT II Air Permit Application as required by 40 CFR Part 63, Subpart MM.

If you have any questions, please contact me at (386) 329-0918.

Sincerely,

Myră J. Carpenter

Environmental Superintendent

tk

Enclosure

cc: W. M. Jernigan, w/o enc.

T. Wyles, w/o enc.

S. Matchett, w/o enc.

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BUREAU OF AIR REGULATION

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MACT II AIR PERMIT APPLICATION GEORGIA-PACIFIC CORPORATION PALATKA MILL

Prepared for:

Georgia-Pacific Corporation North of CR 216; West of US 17 Palatka, Florida 32177

Prepared by:

Golder Associates Inc. 6241 NW 23rd Street, Suite 500 Gainesville, Florida 32653-1500

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STATE OF FLORIDA DEPT, OF ENV. PROTECTION NORTHEAST DISTRICT-JAX

DISTRIBUTION:

- 4 Copies FDEP
- 2 Copies Georgia-Pacific
- 2 Copies Golder Associates Inc.

PART A

APPLICATION FOR AIR PERMIT TITLE V SOURCE



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

<u>Identification</u>	<u>of</u>	Fa	<u>cility</u>
-----------------------	-----------	----	---------------

100	entineation of Facility				
1.	Facility Owner/Company Name:				
ĺ	Georgia-Pacific Corporation				
2.	Site Name:				
	Palatka Mill				
3.	Facility Identification Number:	1070005		[] Unknown	
4.	Facility Location:				
	Street Address or Other Locator: N	lorth of C	R 216; West o	f US 17	
	City: Palatka	County: F	Putnam	Zip Code: 32177	
5.	Relocatable Facility?		6. Existing	Permitted Facility?	
	[] Yes [X] No		[X] Yes	[] No	
<u>Ar</u>	oplication Contact				
1.	Name and Title of Application Cor	ntact:			
	Myra Carpenter, Superintendent of	Environm	nental Affairs		
2.					
	Organization/Firm: Georgia-Pacific Corporation				
	Street Address: P.O. Box 919)			
<u> </u>	City: Palatka	S	tate: FL	Zip Code: 32178-0919	
3.	Application Contact Telephone Nu	mbers:			
	Telephone: (386) 325 - 2001		Fax: (38	6) 328 - 0014	
<u>Ap</u>	Application Processing Information (DEP Use)				
1.	Date of Receipt of Application:		5	30-03.	
2.	Permit Number:		107	30-03 . 0005-031-AL	
3.	PSD Number (if applicable):				
4.	Siting Number (if applicable):				
		•			

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one) Initial Title V air operation permit for an existing facility which is classified as a Title V source. Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source. Current construction permit number: Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application. Current construction permit number: Operation permit number to be revised: Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.) Operation permit number to be revised/corrected: [] Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal. Operation permit number to be revised: Reason for revision: Air Construction Permit Application This Application for Air Permit is submitted to obtain: (Check one) X Air construction permit to construct or modify one or more emissions units. Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units. Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1.	Name and Title of Owner/Authorized Representative or Responsible Official:
	Theodore D. Kennedy, Vice President, Georgia-Pacific, Palatka Operations

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Georgia-Pacific Corporation

Street Address: P.O. Box 919

City: Palatka

State: FL

Zip Code: 32178-0919

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone: (386) 325 - 2001

Fax: (386) 328 - 0014

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative*(check here [], if so) or the responsible official (check here [X], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Signature

Date

Professional Engineer Certification

1. Professional Engineer Name: David A. Buff

Registration Number: 19011

2. Professional Engineer Mailing Address:

Organization/Firm: Golder Associates Inc.*

Street Address: 6241 NW 23rd Street, Suite 500

----**, ----**

City: Gainesville State: FL Zip Code: 32653-1500

3. Professional Engineer Telephone Numbers:

Telephone: (352) 336 - 5600 Fax: (352) 336 - 6603

* Board of Professional Engineers Certificate of Authorization #00001670

^{*} Attach letter of authorization if not currently on file.

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein*, that:

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Dovid a. Buff	5/14/03	
Signature	Date	
(seal)		

^{*} Attach any exception to certification statement.

Scope of Application

Emissions	_	Permit	Processing
Unit ID	Description of Emissions Unit	Type	Fee
018	No. 4 Recovery Boiler	AC1B	
019	No. 4 Smelt Dissolving Tanks (2)	AC1B	
017	No. 4 Lime Kiln	AC1B	
19-1-2001			
			,

Application Processing Fee	
Check one: [] Attached - Amount: \$:	[X] Not Applicable

Construction/Modification Information

1.	Description of Proposed Project or Alterations:
	See Part B
2.	Projected or Actual Date of Commencement of Construction: NA - No Actual Construction
3.	Projected Date of Completion of Construction: NA – No Actual Construction
Ar	oplication Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

- I	Longitude (DD/MM 5. Facility Major Group SIC Code:	SS): 29 / 41 / 0 4. Facility Status	Zone: 17 2. Facility Latitude/Loc Latitude (DD/MM/ 3. Governmental
fajor 6. Facility SIC(s): Code:	5. Facility Major Group SIC Code:	SS): 29 / 41 / 0 4. Facility Status	Latitude (DD/MM/
fajor 6. Facility SIC(s): Code:	5. Facility Major Group SIC Code:	4. Facility Status	
C Code:	Group SIC Code:	1 -	3. Governmental
	•	1 ~ 1	
2611, 2621		Code:	Facility Code:
1	26	Α	0
		(limit to 500 characters):	7. Facility Comment (

Facility Contact

1. Name and Title of Facility Contact	et:	
Myra Carpenter, Superintendent o	f Environmental Affairs	
2. Facility Contact Mailing Address: Organization/Firm: Georgia-Pacit		
Street Address: P.O. Box 919		
City: Palatka	State: FL	Zip Code: 32178-0919
3. Facility Contact Telephone Numb Telephone: (386) 325-2001		

Facility Regulatory Classifications

Check	all	that	ap	ply:
-------	-----	------	----	------

1. [] Small Business Stationary Source? [] Unknown
2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?
3. [] Synthetic Minor Source of Pollutants Other than HAPs?
4. [X] Major Source of Hazardous Air Pollutants (HAPs)?
5. [] Synthetic Minor Source of HAPs?
6. [X] One or More Emissions Units Subject to NSPS?
7. [X] One or More Emission Units Subject to NESHAP?
8. [] Title V Source by EPA Designation?
9. Facility Regulatory Classifications Comment (limit to 200 characters):
List of Applicable Regulations

62-210.700(1) - Excess Emission	
62-210.700(4) - Excess Emission	
62-210.700(5) - Excess Emission	
62-210.700(6) - Excess Emission	
62-296.320(4) - General VE Limit	
See Title V Core List, Effective 3/1/02	

Title V Core List

Effective: 03/01/02

[Note: The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal:

(description)

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.

40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).

40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State:

(description)

CHAPTER 62-4, F.A.C.: PERMITS, effective 06-01-01

62-4.030, F.A.C.: General Prohibition.

62-4.040, F.A.C.: Exemptions.

62-4.050, F.A.C.: Procedure to Obtain Permits; Application.

62-4.060, F.A.C.: Consultation.

62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.

62-4.080, F.A.C.: Modification of Permit Conditions.

62-4.090, F.A.C.: Renewals.

62-4.100, F.A.C.: Suspension and Revocation.

62-4.110, F.A.C.: Financial Responsibility.

62-4.120, F.A.C.: Transfer of Permits.

62-4.130, F.A.C.: Plant Operation - Problems.

62-4.150, F.A.C.: Review.

62-4.160, F.A.C.: Permit Conditions.

62-4.210, F.A.C.: Construction Permits.

62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 06-21-01

62-210.300, F.A.C.: Permits Required.

62-210.300(1), F.A.C.: Air Construction Permits.

62-210.300(2), F.A.C.: Air Operation Permits.

62-210.300(3), F.A.C.: Exemptions.

62-210.300(5), F.A.C.: Notification of Startup.

62-210.300(6), F.A.C.: Emissions Unit Reclassification.

62-210.300(7), F.A.C.: Transfer of Air Permits.

Title V Core List

Effective: 03/01/02

- 62-210.350, F.A.C.: Public Notice and Comment.
- 62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
- 62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
- 62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.
- 62-210.360, F.A.C.: Administrative Permit Corrections.
- 62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
- 62-210.400, F.A.C.: Emission Estimates.
- 62-210.650, F.A.C.: Circumvention.
- 62-210.700, F.A.C.: Excess Emissions.
- 62-210.900, F.A.C.: Forms and Instructions.
- 62-210.900(1), F.A.C.: Application for Air Permit Title V Source, Form and Instructions.
- 62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
- 62-210.900(7), F.A.C.: Application for Transfer of Air Permit Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 08-17-00

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-16-01

- 62-213.205, F.A.C.: Annual Emissions Fee.
- 62-213.400, F.A.C.: Permits and Permit Revisions Required.
- 62-213.410, F.A.C.: Changes Without Permit Revision.
- 62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
- 62-213.415, F.A.C.: Trading of Emissions Within a Source.
- 62-213.420, F.A.C.: Permit Applications.
- 62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
- 62-213.440, F.A.C.: Permit Content.
- 62-213.450, F.A.C.: Permit Review by EPA and Affected States
- 62-213.460, F.A.C.: Permit Shield.
- 62-213.900, F.A.C.: Forms and Instructions.
- 62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
- 62-213.900(7), F.A.C.: Statement of Compliance Form.

Title V Core List

Effective: 03/01/02

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-02-99

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 03-02-99

62-297.310, F.A.C.: General Test Requirements.

62-297.330, F.A.C.: Applicable Test Procedures.

62-297.340, F.A.C.: Frequency of Compliance Tests.

62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.

62-297.350, F.A.C.: Determination of Process Variables.

62-297.570, F.A.C.: Test Report.

62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests

CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98

CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94

CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99

CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant	2. Pollutant	3. Requested E	Emissions Cap	4. Basis for	5. Pollutant
Emitted	Classif.			Emissions	Comment
		lb/hour	tons/year	Cap	
				1	Particulate Matter –
PM	Α				Total
					Particulate Matter –
PM ₁₀	Α				PM ₁₀
					0 16 00 11
SO ₂	Α				Sulfur Dioxide
410					
NO _X	A		 		Nitrogen Oxides
СО	Α				Carbon Monoxide
		-			Volatile Organic
VOC	Α				Compounds
			1		•
SAM	A				Sulfuric Acid Mist
TRS	Α				Total Reduced Sulfu
					Total Hazardous Air
HAPs	Α				Pollutants
H001	A	- 77-0			Acetaldehyde
11004	_				Beryllium
H021	В		-		Compounds
H043	A				Chlassfas
FIV43	<u> </u>		-		Chloroform
H095	Α				Formaldehyde
					i Villialuellyue
H106	Α				Hydrochloric Acid
H115	Α				Methanol
į					

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1.	Area Map Showing Facility Location:
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
2.	Facility Plot Plan:
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
3.	Process Flow Diagram(s):
	[] Attached, Document ID: [] Not Applicable [x] Waiver Requested
4.	Precautions to Prevent Emissions of Unconfined Particulate Matter:
 	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
5.	Fugitive Emissions Identification:
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
6.	Supplemental Information for Construction Permit Application:
	[X] Attached, Document ID: Part B [] Not Applicable
7.	Supplemental Requirements Comment:
1	

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
[] Attached, Document ID: [X] Not Applicable
9. List of Equipment/Activities Regulated under Title VI:
[] Attached, Document ID:
[] Equipment/Activities On site but Not Required to be Individually Listed
[X] Not Applicable
10. Alternative Methods of Operation:
[] Attached, Document ID: [X] Not Applicable
11. Alternative Modes of Operation (Emissions Trading):
[] Attached, Document ID: [X] Not Applicable
12. Identification of Additional Applicable Requirements:
[] Attached, Document ID: [x] Not Applicable
13. Risk Management Plan Verification:
[] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:) or previously submitted to DEP (Date and DEP Office:)
[] Plan to be submitted to CEPPO (Date required:)
[X] Not Applicable
14. Compliance Report and Plan:
[] Attached, Document ID: [X] Not Applicable
15. Compliance Certification (Hard-copy Required):
[] Attached, Document ID: [X] Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

1.	Type of Emission	ns Unit Addressed in Thi	s Section: (Check one)				
[x	X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).						
[] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.						
[=		on addresses, as a single emis es which produce fugitive em	•			
2.	Regulated or Unr	egulated Emissions Unit	? (Check one)				
[x	The emissions emissions unit.		nissions Unit Information Sec	ction is a regulated			
[] The emissions emissions unit.		nissions Unit Information Sec	ction is an unregulated			
3.	Description of Er No. 4 Recovery B		in This Section (limit to 60 c	characters):			
4.	Emissions Unit Id ID: 018	dentification Number:		[] No ID [] ID Unknown			
5.	Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 26	8. Acid Rain Unit?			
9.	Emissions Unit C	Comment: (Limit to 500 C	Characters)	******			

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En	nissions Unit Information Section	1	of _	3		No. 4 Recovery Boiler
<u>En</u>	nissions Unit Control Equipment					
1.	Control Equipment/Method Descrip	tion (Li	mit t	o 200 d	characters p	er device or method):
	Electrostatic Precipitator					
2.	Control Device or Method Code(s):	10				
<u>En</u>	nissions Unit Details					
1.	Package Unit:					701
_	Manufacturer:				Number:	
2.	Generator Nameplate Rating:			MW		
3.	Incinerator Information:	ıro.				٥È
	Dwell Temperatu Dwell Tin					seconds
	Incinerator Afterburner Temperatu					°F

Emissions Unit Information Section 1 of 3

No. 4 Recovery Boiler

B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Heat Input Rate:		1,278	mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr		tons/day
3.	Maximum Process or Throughp	ut Rate:	210,000	lb/hr BLS
4.	Maximum Production Rate:			•
5.	Requested Maximum Operating	Schedule:		·
	24	hours/day	7	days/week
	52	weeks/year	8,760	hours/year
6.	Operating Capacity/Schedule C	omment (limit to 200 c	characters):	
	Maximum heat input rate and the based on 6,084 Btu/lb BLS. Max			

C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

List of Applicable Regulations

- 62-296.404(1)(a)1. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(2)(a) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(3)(c)1.a. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(3)(c)3. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(4)(a) Kraft Recovery Furnaces
- 62-296.404(4)(f) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(5)(a) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(5)(b) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(6)(a) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(6)(b) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(6)(c)1. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(6)(c)4. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-296.404(6)(d) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
- 62-297.310 General Test Requirements
- 62-297.401(1)(a) EPA Method 1 Sample and Velocity Traverses for Stationary Sources
- 62-297.401(2) EPA Method 2 Determination of Stack Gas Velocity and Volumentric Flow Rate
- 62-297.401(3) EPA Method 3 Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight
- 62-297.401(4) EPA Method 4 Determination of Moisture Content in Stack Gases
- 62-297.401(5) EPA Method 5 Determination of Particulate Emissions from Stationary Sources
- 62-297.401(7) EPA Method 7 Determination of Nitrogen Oxide Emissions from Stationary Sources
- 62-297.401(7)(e) EPA Method 7E Determination of Nitrogen Oxide Emissions from Stationary Sources
- 62-297.401(8) EPA Method 8 Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
- 62-297.401(9)(a) EPA Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources
- 62-297.401(10) EPA Method 10 Determination of Carbon Monoxide Emissions from Stationary
- 62-297.401(16) EPA Method 16 Semicontinuous Determination of Sulfur Emissions from Stationary Sources
- 62-297.401(16)(a) EPA Method 16A Determination of Total Reduced Sulfur Emissions from **Stationary Sources**
- 62-297.401(25) EPA Method 25 Determination of Total Gaseous Nonmethane Organic Emissions as Carbon
- 62-297.401(25)(a) EPA Method 25A Determination of Total Gaseous Organic Concentration Using a Flame Ionization Detector
- 62-297.401(34) EPA Method 103 Beryllium Screening Method
- 62-297.401(35) EPA Method 104 Determination of Beryllium Emissions from Stationary Sources
- 40 CFR 63 Subpart MM NESHAPs for Chemical Recovery Combustion Sources, Kraft, Soda, Sulfite, and Stand Alone Semi-Chemical Pulp Mills

DEP Form No. 62-210.900(1) - Form Effective: 2/11/99

D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

lot Plan or 2. Emission Point Type Code: 1							
 Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): ID Numbers or Descriptions of Emission Units with this Emission Point in Common: 							
							
6. Stack Heigh	ht: 230 feet	7. Exit Diameter:	feet				
Rate:		10. Water Vapor: 21	%				
		nission Point Height:					
dscfm			eet				
linates:			-				
ast (km):	Nortl	h (km):					
imit to 200 chara	acters):						
Maximum Dry Standard Flow Rate is at 8 percent O₂.							
	oints Comprising s of Emission Un 6. Stack Height 9. Actual Volumentaria Rate: 44 ow Rate: dscfm dinates: ast (km):	oints Comprising this Emissions of Emission Units with this Emission Units with the	oints Comprising this Emissions Unit for VE Tracking (s of Emission Units with this Emission Point in Commo 6. Stack Height: 230 feet 7. Exit Diameter: 12 9. Actual Volumetric Flow Rate: 447,000 acfm ow Rate: 12. Nonstack Emission Point Height: dscfm dinates: ast (km): North (km): limit to 200 characters):				

1	of	3
•	01	၁

E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

Se	Segment Description and Rate: Segment 1 of 2							
1.	Segment Description (Prod	cess/Fuel Type)	(limit to 500 ch	aract	ers):			
	Pulp and Paper and Wood Products, Sulfate (Kraft) Pulping, Recovery Furnace/Indirect Contact Evaporator.							
2.	Source Classification Cod 3-07-001-10	e (SCC):	3. SCC Units		Inbleached Pulp Produced			
4.	Maximum Hourly Rate: 118	5. Maximum 675,250	Annual Rate:	6.	Estimated Annual Activity Factor:			
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:			
10.	Segment Comment (limit	to 200 characters	s):					
	Maximum annual rate is ba (monthly average).	ised on maximun	n daily rate of 1,8	350 to	ons/day ADUP			
Sa	gment Description and De	star Coomant	f 2					
<u> 56</u>	gment Description and Ra		2 of 2					
1.	Segment Description (Pro-	cess/Fuel Type)	(limit to 500 ch	aract	ers):			
	External Combustion Boile	ers; Industrial: R	esidual Oil					
2.	Source Classification Cod 1-02-004-01	e (SCC):	3. SCC Units		Burned			
4.	Maximum Hourly Rate: 8.52	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:			
7.	Maximum % Sulfur: 2.35	8. Maximum % Ash: 9. Million Btu per SCC Unit: 150						
10.	Segment Comment (limit	to 200 characters	s):	•	· · · · · · · · · · · · · · · · · · ·			
	Residual oil may include No. 6 fuel oil and on spec used oil. Fuel used for startup, shutdown, and malfunction only; therefore, an annual rate is inappropriate.							

F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
010		EL
010		EL
		NS
		NS
010		NS
	010	Device Code 010 010

Emissions Unit Information Section	1_	of	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	1	of	9	Particulate Matter - Total

Po	tential/rugitive Emissions					
1.	Pollutant Emitted:	2. Total	Percent Efficie	ency of Control:		
	PM					
3.	Potential Emissions: 83.75 lb/hour	366.8	tons/year	4. Synthetically Limited? []		
5.	Range of Estimated Fugitive Emissions:	_		•		
	[] 1 [] 2 [] 3		to to	ns/year		
6.	Emission Factor: 0.030 gr/dscf @ 8 percent	O ₂		7. Emissions		
	Reference: BACT			Method Code: 0		
8.	Calculation of Emissions (limit to 600 chara	cters):				
	0.030 gr/dscf x 325,677 dscfm x 60 min/hr ÷ 7,000 gr/lb = 83.75 lb/hr					
	Pollutant Potential/Fugitive Emissions Com					
All	lowable Emissions Allowable Emissions	1 of_	1			
1.	Basis for Allowable Emissions Code: OTHER		re Effective Da	ate of Allowable		
3.	Requested Allowable Emissions and Units:	4. Equi	valent Allowal	ble Emissions:		
	0.030 gr/dscf @ 8 percent O ₂	8:	3. 75 lb/hour	366.8 tons/year		
5.	Method of Compliance (limit to 60 character	rs):				
	Annual stack test using EPA Methods 5, 17, o	or 29.				
6.	Allowable Emissions Comment (Desc. of O	perating M	(lethod) (limit to	o 200 characters):		
	Based on Title V permit and PSD permit limit.					

Emissions Unit Information Section	1	of _	3	No. 4 Recovery Boile
Pollutant Detail Information Page	2	of	9	Particulate Matter – PM₁

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
PM ₁₀	
3. Potential Emissions:	4. Synthetically
83.75 lb/hour	366.8 tons/year Limited? []
5. Range of Estimated Fugitive Emissions:	
	to tons/year
6. Emission Factor: 0.030 gr/dscf @ 8 percent	O ₂ 7. Emissions Method Code:
Reference: BACT	0
8. Calculation of Emissions (limit to 600 chara	ncters):
D14 11 11 11 11 11 11 11 11 11 11 11 11 11	
PM ₁₀ limit equal to PM limit.	
9. Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 characters):
7. Tollatant Fotontial/Fugitive Emissions Conf	ment (mint to 200 characters).
Allowable Emissions Allowable Emissions	<u>1</u> of <u>1</u>
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable
OTHER	Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
0.030 gr/dscf @ 8 percent O₂	83.75 lb/hour 366.8 tons/year
5. Method of Compliance (limit to 60 characte	rs):
Associated the test of the Space of the Spac	
Annual stack test using EPA Methods 5, 17, o	or 29.
6. Allowable Emissions Comment (Desc. of O	perating Method) (limit to 200 characters):
·	

Emissions Unit Information Section	1	of	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	3	of	9	Sulfur Dioxide

1.	Pollutant Emitted:	2.	Tota	Percent E	ficien	cy of Control:
	so₂	[•
3.	Potential Emissions: 121.7 lb/hour	53	3.2	tons/year	4	4. Synthetically Limited? []
5.	Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3			to	_ tons	/year
6.	Emission Factor: 75 ppmvd @ 8 percent O₂ Reference: Permit Limit				7	7. Emissions Method Code:
8.	Calculation of Emissions (limit to 600 chara	otorc	١.			0
	75 ppmvd x 325,677 dscfm x 60 min/hr x 2 x 64/1,545 ft-lb _f /lb _m - °R ÷ 528°R = 121.7 l		.O 104	•		
9.	Pollutant Potential/Fugitive Emissions Com	ment	(lim	it to 200 ch	aracte	rs):
All	lowable Emissions Allowable Emissions	1	of_	1		
1.	Basis for Allowable Emissions Code: OTHER	2.		re Effectiv	e Date	of Allowable
3.	Requested Allowable Emissions and Units:	4.	Equ	ivalent Alle	owable	Emissions:
	75 ppmvd @ 8 percent O₂		1	21.7 lb/hou	ır	533.4 tons/year
5.	Method of Compliance (limit to 60 character	rs):		• • • • • • • • • • • • • • • • • • • •		
	Annual stack test using EPA Method 8					
6.	Allowable Emissions Comment (Desc. of O	perat	ing N	1ethod) (lir	nit to 2	200 characters):
	BACT					

Emissions Unit Information Section	1	of	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	4	of	9	Nitrogen Oxides

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
NO _X	
3. Potential Emissions: 186.7 lb/hour	817.5 tons/year 4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3	totons/year
6. Emission Factor: 80 ppmvd @ 8 percent O ₂	i
Reference: BACT	Method Code:
8. Calculation of Emissions (limit to 600 chara	acters):
80 ppmvd x 325,677 dscfm x 60 min/hr x x 46/1,545 ft-lb _f /lb _m -°R ÷ 528°R = 186.7 lb	
9. Pollutant Potential/Fugitive Emissions Com	iment (limit to 200 characters):
Allowable Emissions Allowable Emissions	<u>1</u> of <u>1</u>
Basis for Allowable Emissions Code: OTHER	Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
80 ppmvd @ 8 percent O₂	186.7 lb/hour 817.5 tons/year
5. Method of Compliance (limit to 60 characte	ers):
Annual stack test using EPA Method 7 or 7E	
6. Allowable Emissions Comment (Desc. of C	perating Method) (limit to 200 characters):
BACT	

Emissions Unit Information Section	1	of _	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	5	of	9	Carbon Monoxide

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
со	
3. Potential Emissions:	4. Synthetically
1,135.9 lb/hour	2,487.6 tons/year Limited? []
5. Range of Estimated Fugitive Emissions:	
	totons/year
6. Emission Factor: 800 ppmvd @ 8 percent O	
Reference: BACT	Method Code:
8. Calculation of Emissions (limit to 600 chara	acters):
CO limit of 000 manual (0 to our occurs) and	400 (04 bases assess) based as DAGT
CO limit of 800 ppmvd (3-nour average) and	400 ppmvd (24-hour average) based on BACT.
800 ppmvd x 325,677 dscfm x 60 min/hr x	
\times 28/1,545 ft-lb _f /lb _m - $^{\circ}$ R ÷ 528 $^{\circ}$ R = 1,135.9	lb/hr
9. Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 characters):
January agree Emissions Com	ment (mint to 200 characters).
Allowable Emissions Allowable Emissions	1 of 2
Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable
OTHER	Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
800 ppmvd at 8 percent O ₂ , 3 hr	1,135.9 lb/hour tons/year
5. Method of Compliance (limit to 60 characte	rs):
Annual stack test using EPA Method 10	
6. Allowable Emissions Comment (Desc. of O	perating Method) (limit to 200 characters):
BACT	

Emissions Unit Information Section	1	of	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	5	of	9	Carbon Monoxide

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
со	
3. Potential Emissions: lb/hour	4. Synthetically tons/year Limited? []
5. Range of Estimated Fugitive Emissions:	
	totons/year
6. Emission Factor:	7. Emissions Method Code:
Reference:	Method Code:
8. Calculation of Emissions (limit to 600 chara	acters):
·	
9. Pollutant Potential/Fugitive Emissions Com	iment (limit to 200 characters):
Allowable Emissions Allowable Emissions	2 of 2
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
400 ppmvd at 8 percent O ₂ , 24 hour	lb/hour 2,487.6 tons/year
5. Method of Compliance (limit to 60 characte	ers):
Annual stack test using EPA Method 10	
6. Allowable Emissions Comment (Desc. of O	perating Method) (limit to 200 characters):
BACT	

Emissions Unit Information Section	1	of	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	6	of	9	Volatile Organic Compound

3. Potential Emissions: 31.5 b/hour 138 tons/year Limited? [5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3totons/year 6. Emission Factor: 0.3 b/ton (BLS) 7. Emissions Reference: BACT Method Code: 0]
31.5 lb/hour 138 tons/year Limited? [5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3totons/year 6. Emission Factor: 0.3 lb/ton (BLS) 7. Emissions Reference: BACT Method Code:]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year 6. Emission Factor: 0.3 lb/ton (BLS)]
[] 1 [] 2 [] 3totons/year 6. Emission Factor: 0.3 lb/ton (BLS) 7. Emissions Reference: BACT Method Code:	
6. Emission Factor: 0.3 lb/ton (BLS) Reference: BACT 7. Emissions Method Code:	
Reference: BACT Method Code:	
Reference: BACI	
8. Calculation of Emissions (limit to 600 characters):	
0.00 lb/b DLC 405 TDU DLC 04 5 lb/b	
0.30 lb/ton BLS x 105 TPH BLS = 31.5 lb/hr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	
7. Tonatant I otomas i agrivo Emissiono Comment (mint to 200 emilactoro).	
Allowable Emissions 1 of 1	
Basis for Allowable Emissions Code: 2. Future Effective Date of Allowable	
OTHER Emissions:	
3. Requested Allowable Emissions and Units: 4. Equivalent Allowable Emissions:	
0.30 lb/ton (BLS) 31.5 lb/hour 138 tons/year	
5. Method of Compliance (limit to 60 characters):	
3. Method of Comphanice (mint to 60 characters).	
Annual stack test using EPA Method 25 or 25A	
Annual stack test using EPA Method 25 or 25A 6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	
Annual stack test using EPA Method 25 or 25A	

Emissions Unit Information Section	1	of	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	_ 7	of	9	Sulfuric Acid Mist

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Po	otential/Fugitive Emissions			
1.	Pollutant Emitted:	2. Tota	l Percent Effici	iency of Control:
	SAM			•
3.	Potential Emissions:	L		4. Synthetically
	3.3 lb/hour	14.7	tons/year	Limited? []
5.	Range of Estimated Fugitive Emissions:			
_	[] 1		to to	ons/year
6.				7. Emissions Method Code:
	Reference: Permit limit			0
8.	Calculation of Emissions (limit to 600 chara	cters):		
	0.81 ft ³ /10 ⁶ ft ³ x 447,000 acf/min x 2,116.8 II	h/#² ∨ 0.0	Ib /U 60 \/Ib	
	1,545.3 ft-lb _e /lb _m -°R ÷ 860°R x 60 min/hr = 3	3.3 lb/hr	ID (H2SO4)/ID- P	noi (H ₂ SU ₄) ÷
9.	Pollutant Potential/Fugitive Emissions Comm	ment (lim	it to 200 charac	eters):
				,
All	lowable Emissions Allowable Emissions	1 of _	1	
1.	Basis for Allowable Emissions Code:	2. Futi	re Effective D	ate of Allowable
	OTHER		ssions:	
3.	Requested Allowable Emissions and Units:	4. Equ	ivalent Allowa	ble Emissions:
	0.81 ppmvd		3.3 lb/hour	14.7 tons/year
5.	Method of Compliance (limit to 60 character	s):		
	NCASI 106			
6.	Allowable Emissions Comment (Desc. of Op	perating N	lethod) (limit t	o 200 characters):
	BACT			
				i

Emissions Unit Information Section	1	of _	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	8	of	9	Total Reduced Sulfur

1.	Pollutant Emitted:	2.	Tota	l Percent Eff	iciency	of Control:
	TRS	l				
3.	Potential Emissions:				4.	Synthetically
	19.4 lb/hour	5	3.1	tons/year		Limited? []
5.	Range of Estimated Fugitive Emissions:					
	[] 1 [] 2 [] 3			to	tons/y	
6.	Emission Factor: 11.2 ppmvd @ 8 percent C)2			7.	
	Reference: BACT					Method Code: 0
8.	Calculation of Emissions (limit to 600 chara	cters	;):		·	
	11.2 ft ³ /10 ⁶ ft ³ x 325,677 ft ³ /min x 60 min/hr lb·mol °R/1,545.3 ft-lb x 34 lb (H₂S)/lb·mol				lb/hr	
9.	Pollutant Potential/Fugitive Emissions Com	ment	(lim	it to 200 cha	racters):
<u>Al</u>	lowable Emissions Allowable Emissions	1	of_	2		
1.	Basis for Allowable Emissions Code: OTHER	2.		ure Effective issions:	Date o	f Allowable
3.	Requested Allowable Emissions and Units:	4.	Equ	ivalent Allov	vable I	Emissions:
	11.2 ppmvd @ 8 percent O₂			19.4 lb/hour		tons/year
5.	Method of Compliance (limit to 60 character	rs):				
	Annual stack test using EPA Method 16 or 16	A				
6.	Allowable Emissions Comment (Desc. of Op	perat	ing N	Aethod) (limi	t to 20	0 characters):
	BACT (maximum 12-hour average).					

Emissions Unit Information Section	1	of _	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	8	of	9	Total Reduced Sulfur

Potential/Fugitive Emissions

		
1.	Pollutant Emitted:	2. Total Percent Efficiency of Control:
	TRS	
3.	Potential Emissions:	4. Synthetically
	lb/hour	tons/year Limited? []
5.	Range of Estimated Fugitive Emissions:	
		tototons/year
6.	Emission Factor:	7. Emissions
	Reference:	Method Code:
8.	Calculation of Emissions (limit to 600 chara	cters):
9.	Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 characters):
	Totalian Totalian aginto Emissions Com	ment (mint to 200 characters).
ļ		
Ali	lowable Emissions Allowable Emissions	2 of 2
1.		2. Future Effective Date of Allowable
<u> </u>	OTHER	Emissions:
3.	Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
	7.0 ppmvd @ 8 percent O ₂	lb/hour 53.1 tons/year
5.	Method of Compliance (limit to 60 character	rs):
	Continuous manifest for TDC	
	Continuous monitor for TRS	
6.	Allowable Emissions Comment (Desc. of Op	perating Method) (limit to 200 characters):
į		

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Emissions Unit Information Section	1	of	3	No. 4 Recovery Boiler
Pollutant Detail Information Page	9	of	9	Beryllium Compounds

Potential/Fugitive Emissions

	ACERTIAL I AGITIVE DIMISSIONS					
1.	Pollutant Emitted:	2. Total Percent Efficiency of Co	ontrol:			
	H021					
3.	Potential Emissions:	4. Syntl	hetically			
	0.00064 lb/hour	0.0028 tons/year Limi	ted? []			
5.	Range of Estimated Fugitive Emissions:					
		totons/year	.			
6.	Emission Factor: 0.5 lb/10 ¹² Btu	7. Emis				
	Reference: Permit Limit	0 Meth	od Code:			
8.	Calculation of Emissions (limit to 600 chara	acters):				
	0.5 lb/10 ¹² Btu x 210,000 lb/hr BLS x 6,084 Btu/lb BLS = 0.00064 lb/hr					
9.	9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):					
	Pollutant: Beryllium. Permit limit is 0.00064	lb/hr.				
Al	Allowable Emissions 1 of 1					
1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allometrissions:	wable			
3.	Requested Allowable Emissions and Units:	4. Equivalent Allowable Emission	ons:			
	0.5 lb/10 ¹² Btu	0.00064 lb/hour 0.0028 t	ons/year			
5.	Method of Compliance (limit to 60 character	rs):				
	Stack test using EPA Method 103 or 104 ever	ry 5 years.				
6.	Allowable Emissions Comment (Desc. of Op	perating Method) (limit to 200 char	acters):			
	BACT.					

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H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Vi</u>	sible Emissions Limitation: Visible Emissi	ions Limitation 1 of 1				
1.	Visible Emissions Subtype: VE20	Basis for Allowable Opacity: [X] Rule [] Other				
3.	Requested Allowable Opacity: Normal Conditions: 20 % Ex Maximum Period of Excess Opacity Allower	sceptional Conditions: % ed: min/hour				
4.	Method of Compliance:					
	Annual VE test using EPA Method 9.					
5.	Visible Emissions Comment (limit to 200 c	haracters):				
	BACT					
	BACI					
L						
	I. CONTINUOUS MONITOR INFORMATION					
	• •	Subject to Continuous Monitoring)				
<u>Cc</u>	entinuous Monitoring System: Continuous	Monitor 1 of 2				
1.	Parameter Code: EM	2. Pollutant(s): TRS				
3.	CMS Requirement:	[X] Rule [] Other				
4.	Monitor Information:					
	Manufacturer: Thermal Environmental In					
<u> </u>	Model Number: Not available	Serial Number: Not available				
5.	Installation Date: Dec 2000	6. Performance Specification Test Date:				
7.	Continuous Monitor Comment (limit to 200) characters):				
	Monitor information describes equipment in operation. G-P reserves the right to replace this equipment as maintenance may require.					

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Emissions Unit Information Section

No. 4 Recovery Boiler

H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

	sible Emissions Limitation: Visible Emissi	ons Limitation of				
1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity:				
<u></u>		[] Rule [] Other				
3.	Requested Allowable Opacity:					
		ceptional Conditions: %				
	Maximum Period of Excess Opacity Allowed: min/hour					
1	Mathed of Committee					
•.	Method of Compliance:					
5.	Visible Emissions Comment (limit to 200 c	haracters):				
İ						
<u> </u>						
	I. CONTINUOUS MO	NITOR INFORMATION				
		Subject to Continuous Monitoring)				
Co	ontinuous Monitoring System: Continuous	Monitor 2 of 2				
	Parameter Code: O ₂					
1.	rarameter Code: O ₂	2. Pollutant(s):				
3.	CMS Requirement:	[X] Rule [] Other				
4.	Monitor Information:					
- '	Manufacturer: Thermal Environmental Ins	strument. Inc.				
		Number: Not available				
5.	Installation Date:	6. Performance Specification Test Date:				
_	Dec 2000					
7.	Continuous Monitor Comment (limit to 200	characters):				
	Rule 62-296.404(5)(b)1.a. Monitor information	describes equipment in operation. G.P.				
	reserves the right to replace this equipment	as maintenance may require.				

Emissions	Unit I	nformatio	n Section
	CHILL	uivi mativ	

1 of	3
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No. 4 Recovery Boiler

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Supplemental Requirements

1.	Process Flow Diagram
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
2.	Fuel Analysis or Specification
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
3.	Detailed Description of Control Equipment
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
4.	Description of Stack Sampling Facilities
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
	[] Attached, Document ID:
	[] Previously submitted, Date:
	[X] Not Applicable
6.	Procedures for Startup and Shutdown
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
7.	Operation and Maintenance Plan
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[X] Attached, Document ID: Part B [] Not Applicable
9.	Other Information Required by Rule or Statute
ļ	Attached, Document ID: [X] Not Applicable
	[] Attached, Document ID: [X] Not Applicable
10	Supplemental Requirements Comment:
10	
10	
10	
10	

Emissions	Unit	Inform	ation	Section
	~	**********	uuvu	OCCHUI

1 of	3
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No. 4 Recovery Boiler

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[] Attached, Document ID: [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[] Attached, Document ID: [X] Not Applicable
14. Compliance Assurance Monitoring Plan
[] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
[] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[] Phase II NO _x Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
[] Phase NO _x Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[X] Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

1.	. Type of Emissions Unit Addressed in This Section: (Check one)					
[x	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).					
[process or prod		n addresses, as a single emis s which has at least one defin titive emissions.			
[•		n addresses, as a single emis s which produce fugitive em			
2.	Regulated or Unr	egulated Emissions Unit	? (Check one)			
[x	The emissions emissions unit.	unit addressed in this Em	issions Unit Information Sec	ction is a regulated		
[] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.					
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): No. 4 Smelt Dissolving Tanks (2)						
4.	Emissions Unit Id	dentification Number:		[] No ID		
	ID: 019 [] ID Unknown					
5.	Emissions Unit	6. Initial Startup	7. Emissions Unit Major	8. Acid Rain Unit?		
	Status Code:	Date:	Group SIC Code: 26	[]		
9.	9. Emissions Unit Comment: (Limit to 500 Characters)					
!	Emissions unit co	onsists of two smelt disso	olving tanks with a Venturi sc	rubber on each tank.		
l						

Emissions Unit Information Section	2	of	3	No. 4 Smelt Dissolving Tanks (2)
Emissions Unit Control Equipment				
1. Control Equipment/Method Descri	ption (Limit	to 200	characters per device or method):
Venturi scrubbers; one for each sm	elt diss	olvin	u tank	
			,	
2. Control Device or Method Code(s)	: 53			
				
Emissions Unit Details				
1. Package Unit:			14.3	Lal Maria barra
Manufacturer: 2. Generator Nameplate Rating:			MW	lel Number:
			161.44	
3. Incinerator Information: Dwell Tempera	ture:			٥Ē
Dwell Tempera Dwell T				seconds
Incinerator Afterburner Tempera				°F

Emissions Unit Information Section	2	of	3	No. 4 Smelt Dissolving Tanks (2)
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B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Heat Input Rate:			mmBtu/hr	
2.	Maximum Incineration Rate:	lb/hr		tons/day	
3.	Maximum Process or Throughp	ut Rate:	210,000	lb/hr BLS	
4.	Maximum Production Rate:				
5.	Requested Maximum Operating	Schedule:			
	24	hours/day	7	days/week	
	52	weeks/year	8,760	hours/year	
6.	Operating Capacity/Schedule C	omment (limit to 200	characters):		
	BLS feed to the No. 4 Recovery	Boiler as a 24-hr avera	ge.		

C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

List of Applicable Regulations

```
62-296.320(4)(a)2. General Pollutant Emission Limiting Standards
62-296.320(4)(a)3.a.(ii) General Pollutant Emission Limiting Standards
62-296.320(4)(a)3.c. General Pollutant Emission Limiting Standards
62-296.320(4)(b) General Pollutant Emission Limiting Standards
62-296.404(2)(b) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(3)(d). Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(4)(c)1. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(4)(c)3. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(4)(f) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(5)(d) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(6)(a) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(6)(b) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(6)(c)3. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(6)(c)4. Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-296.404(6)(d) Kraft (Sulfate) Pulp Mills and Tall Oil Plants
62-297.310 General Test Requirements
62-297.401(1)(a) EPA Method 1 - Sample and Velocity Traverses for Stationary Sources
62-297.401(2) EPA Method 2 - Determination of Stack Gas Velocity and Volumentric Flow Rate
62-297.401(3) EPA Method 3 - Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry
   Molecular Weight
62-297.401(4) EPA Method 4 - Determination of Moisture Content in Stack Gases
62-297.401(5) EPA Method 5 - Determination of Particulate Emissions from Stationary Sources
62-297.401(9)(a) EPA Method 9 - Visual Determination of the Opacity of Emissions from Stationary
62-297.401(16) EPA Method 16 – Semicontinuous Determination of Sulfur Emissions from
  Stationary Sources
62-297.401(16)(a) EPA Method 16A - Determination of Total Reduced Sulfur Emissions from
  Stationary Sources
40 CFR 63 - Subpart MM - NESHAPs for Chemical Recovery Combustion Sources, Kraft, Soda,
  Sulfite, and Stand Alone Semi-Chemical Pulp Mills
```

D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

1.	Identification of Point on Plot Plan or Flow Diagram? 019		2. Emission Po	oint Type Code:				
3.	3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):							
	Two smelt dissolving tank vents, each with a venturi scrubber.							
4.	ID Numbers or Description	s of Emission Ur	nits with this Emi	ssion Point in Commo	n:			
5.	Discharge Type Code:	6. Stack Heigh		7. Exit Diameter:	C 4			
	•		206 feet	5	feet			
8.	Exit Temperature:	[umetric Flow	10. Water Vapor:				
	170 °F	Rate:	0,000 acfm		%			
11.	Maximum Dry Standard Flo		<u> </u>	nission Point Height:				
		dscfm		_	eet			
13.	Emission Point UTM Coord	linates:						
	Zone: E	ast (km):	North	h (km):				
14.	Emission Point Comment (1	imit to 200 char	acters):					
	There are two identical smelt dissolving tanks. Stack parameters are the same for each smelt dissolving tank.							

E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

<u>Se</u>	Segment Description and Rate: Segment 1 of 1							
1.	1. Segment Description (Process/Fuel Type) (limit to 500 characters):							
-	Pulp and Paper and Wood Tank: General.	Products, Sulfate	e (Kraft) Pulping.	, Sme	elt Dissolving			
2.	Source Classification Cod	e (SCC):	3. SCC Units					
	3-07-001-05	, ,	Tons Air-di	ried L	Inbleached Pulp Produced			
4.	Maximum Hourly Rate: 118	5. Maximum 675,250	Annual Rate:	6.	Estimated Annual Activity Factor:			
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:			
10.	. Segment Comment (limit	to 200 characters	s):					
	Maximum annual rate is based on maximum daily rate of 1,850 tons/day ADUP (monthly average).							
Se	gment Description and Ra	ite: Segment_	of					
1.	1. Segment Description (Process/Fuel Type) (limit to 500 characters):							
2.	Source Classification Code	e (SCC):	3. SCC Units	:				
4.	Maximum Hourly Rate:	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:			
7.	7. Maximum % Sulfur: 8. Maximum % Ash: 9. Million Btu per SCC Un							
10.	10. Segment Comment (limit to 200 characters):							

F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	053		EL
PM ₁₀	053		EL
SO₂			NS
NO _X			NS
voc			NS
TRS	053		EL
HAPs			NS
H095			NS
H115			NS
			_
			-

Emissions Unit Information Section	2	of	3	No. 4 Smelt Dissolving Tanks (2)
Pollutant Detail Information Page	1	of	3	Particulate Matter - Tota

	<u>,</u> ,	
1.	Pollutant Emitted:	2. Total Percent Efficiency of Control:
	PM	
3.	Potential Emissions:	4. Synthetically
	12.6 lb/hour	55.2 tons/year Limited? []
5.	Range of Estimated Fugitive Emissions:	
	[] 1 [] 2 [] 3	totons/year
6.	Emission Factor: 0.12 lb/ton BLS	7. Emissions
	Reference: BACT	Method Code: 0
8.	Calculation of Emissions (limit to 600 chara-	icters):
	PM limit based on Title V permit and PSD per	mit.
	0.12 lb/ton BLS x 105 tons/hr BLS = 12.6 lb/	/hr
9	Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 characters):
^``	Tomatan Totolician agreeve Emissions Com	ment (mint to 200 characters).
<u> </u>	<u> </u>	
Al	lowable Emissions Allowable Emissions	1 of 1
1.	Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable
	OTHER	Emissions:
3.	Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
	0.12 lb/ton BLS	12.6 lb/hour 55.2 tons/year
5.	Method of Compliance (limit to 60 character	rs):
	Annual stack test using EPA Method 5.	
_		
6.	Allowable Emissions Comment (Desc. of Op	perating Method) (limit to 200 characters):
	BACT.	

Emissions Unit Information Section	2	of _	3	No. 4 Smelt Dissolving Tanks (2)
Pollutant Detail Information Page	2	of	3	Particulate Matter – PM ₁₀

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
PM ₁₀	
3. Potential Emissions: 12.6 lb/hour	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3	to tons/year
6. Emission Factor: 0.12 lb/ton BLS	7. Emissions
Reference: BACT	Method Code: 0
8. Calculation of Emissions (limit to 600 chara	acters):
PM ₁₀ limit based on PM emissions and BAC	т.
0 Pollutant Potential/Eusitina Emissiona Com	(ii4 + 200 -l).
9. Pollutant Potential/Fugitive Emissions Con	iment (timit to 200 characters):
	<u> </u>
Allowable Emissions Allowable Emissions	<u>1</u> of <u>1</u>
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	
0.12 lb/ton BLS	12.6 lb/hour 55.2 tons/year
5. Method of Compliance (limit to 60 character	ers):
Annual stack test using EPA Method 5	
_	
6. Allowable Emissions Comment (Desc. of C	perating Method) (limit to 200 characters):
BACT	

Emissions Unit Information Section	2	of	3	No. 4 Smelt Dissolving Tanks (2
Pollutant Detail Information Page	2	of	3	Particulate Matter – PM₁

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1.	Pollutant Emitted:	2. T	otal Percent Effici	ency	of Control:
	PM ₁₀				
3.	Potential Emissions: lb/hour		tons/year	4.	Synthetically Limited? []
5.	Range of Estimated Fugitive Emissions:			. ,	
6.	Emission Factor:		to to	ns/y 7.	ear Emissions
0.				′·	Method Code:
	Reference:				Withing Code.
8.	Calculation of Emissions (limit to 600 chara	cters)			
9.	Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 charac	eters) :
Al	lowable Emissions Allowable Emissions	2 (of <u>2</u>		
1.	Basis for Allowable Emissions Code: OTHER	1	Future Effective D Emissions:	ate o	of Allowable
3.	Requested Allowable Emissions and Units:	4.	Equivalent Allowa	ble I	Emissions:
	12.6 lb/hr		12.6 lb/hour		55.2 tons/year
5.	Method of Compliance (limit to 60 character	rs):			
6.	Allowable Emissions Comment (Desc. of O	peratii	ng Method) (limit t	o 20	0 characters):

Emissions Unit Information Section	2	of _	3	No. 4 Smelt Dissolving Tanks (2)
Pollutant Detail Information Page	3	of	3	Total Reduced Sulfur

Potential/Fugitive Emissions

rotential/rugitive Emissions		\
1. Pollutant Emitted:	2. Total Percent Effici	ency of Control:
TRS		
3. Potential Emissions:		4. Synthetically
3.4 lb/hour	14.9 tons/year	Limited? []
5. Range of Estimated Fugitive Emissions:		
	to to	ons/year
6. Emission Factor: 0.048 lb/3000 lb BLS		7. Emissions
Reference: 62.296.404(3)(d)1.		Method Code: 5
8. Calculation of Emissions (limit to 600 cha	racters):	
0.048 lb/3,000 lb BLS x 210,000 lb/hr BLS	= 3.4 lb/hr	
9. Pollutant Potential/Fugitive Emissions Co	mment (limit to 200 chara	otors):
7. I Unutant i Otential/i ugitive Limbolono Co.	milital (milit to 200 chara	sters).
Allowable Emissions Allowable Emissions	1 of 1	
Basis for Allowable Emissions Code:	2. Future Effective D	ate of Allowable
OTHER	Emissions:	
3. Requested Allowable Emissions and Units	s: 4. Equivalent Allowa	ble Emissions:
0.048 lb/3000 lb BLS	3.4 lb/hour	14.9 tons/year
5. Method of Compliance (limit to 60 charac	ters):	
Annual start to the EDAM II 140		
Annual stack test using EPA Method 16 or	16A	
6. Allowable Emissions Comment (Desc. of	Operating Method) (limit t	to 200 characters):
69 206 404/2\/4\4		
62-296.404(3)(d)1.		

F	miccia	me I	mit In	formatio	n Section
L	mussic	ons t	on no	iormatio	n Section

2 of 3	
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No. 4 Smelt Dissolving Tanks (2)

H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

	sible Emissions Limitation: Visible Emissi	ons Limitation 1 of 1			
1.	Visible Emissions Subtype: VE20	Basis for Allowable Opacity: X Rule Other			
3.	Requested Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allower	cceptional Conditions: % ed: min/hour			
4.	Method of Compliance:				
5.	Visible Emissions Comment (limit to 200 characters): Due to moisture interference, the visible emission limiting standard pursuant to F.A.C. Rule 62-296.320(4) is not applicable and is deferred to F.A.C. Rule 62-296.404(2)(b).				
I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring) Continuous Monitoring System: Continuous Monitor1 of2					
	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous	Subject to Continuous Monitoring) Monitor1 of2			
	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous	Subject to Continuous Monitoring)			
1.	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous	Subject to Continuous Monitoring) Monitor1 of2			
1. 3.	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: FLOW	Subject to Continuous Monitoring) Monitor1 _ of2 2. Pollutant(s): [X] Rule			
 3. 4. 5. 	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: FLOW CMS Requirement: Monitor Information: Manufacturer: Foxboro Model Number: 2803-SABA-TSA-G	Subject to Continuous Monitoring) Monitor1 of2 2. Pollutant(s): [X] Rule			

II VICIDI E EMICCIONO INEO

H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Vis</u>	ible Emissions Limitation: Visible Emissi	ons	Limit	tation	of	
1.	Visible Emissions Subtype:	2.	Basi	s for Allowa	ble Opac	ity:
<u> </u>				Rule] Other
	Requested Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allower	-	tional	Conditions:		% min/hour
	Method of Compliance:	-				
5.	Visible Emissions Comment (limit to 200 c	hara	cters)):		
Con	I. CONTINUOUS MO (Only Regulated Emissions Units ntinuous Monitoring System: Continuous	Sul	ject	to Continuo	us Moni	toring)
1.	Parameter Code: FLOW	2.	Poll	utant(s):		
3.	CMS Requirement:	[X] R	tule	[] Other
4.	Monitor Information: Manufacturer: Taylor	~			_	
	Model Number: Not available	,		umber: See		
I	Installation Date: 01 Dec 1976	0.	Peri	ormance Spe	cificatio	n Test Date:
7.	7. Continuous Monitor Comment (limit to 200 characters):					
Monitor information describes equipment in operation. G-P reserves the right to replace this equipment as maintenance may require.						

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Supplemental Requirements

1.	Process Flow Diagram
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
2.	Fuel Analysis or Specification
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
3.	Detailed Description of Control Equipment
	[] Attached, Document ID: [] Not Applicable [x] Waiver Requested
4.	Description of Stack Sampling Facilities
	[] Attached, Document ID:[] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
	[] Attached, Document ID:
	[] Previously submitted, Date:
	[X] Not Applicable
6.	Procedures for Startup and Shutdown
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
7.	Operation and Maintenance Plan
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[X] Attached, Document ID: Part B [] Not Applicable
9.	Other Information Required by Rule or Statute
	[] Attached, Document ID: [X] Not Applicable
10	. Supplemental Requirements Comment:

Emissions Unit Information Section 2 of 3

2	of	3

No. 4 Smelt Dissolving Tanks (2)

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[] Attached, Document ID: [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[] Attached, Document ID: [X] Not Applicable
14. Compliance Assurance Monitoring Plan
[] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
[] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[] Phase II NO _x Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
[] Phase NO _x Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[X] Not Applicable

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No. 4 Lime Kiln

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

_	Emissions out Description and ottatus						
1.	1. Type of Emissions Unit Addressed in This Section: (Check one)						
[x	X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).						
] [process or prod		n addresses, as a single emis s which has at least one defi gitive emissions.				
[_		n addresses, as a single emises which produce fugitive em				
2.	Regulated or Unr	egulated Emissions Unit	? (Check one)				
[x	The emissions emissions unit.	unit addressed in this Em	nissions Unit Information Sec	ction is a regulated			
[] The emissions emissions unit.	unit addressed in this Em	nissions Unit Information Sec	ction is an unregulated			
3.	 Description of Emissions Unit Addressed in This Section (limit to 60 characters): No. 4 Lime Kiln 						
4.	Emissions Unit Io	dentification Number:		[] No ID [] ID Unknown			
		·	,				
5.	Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 26	8. Acid Rain Unit?			
9.	9. Emissions Unit Comment: (Limit to 500 Characters)						
[

Emissions Unit Control Equipment

1.	Control Equipment/Method Description (Limit to 200 characters per device or method):
	Venturi scrubber
2.	Control Device or Method Code(s): 53

Emissions Unit Details

1.	Package Unit:		
	Manufacturer:	Model Number:	
2.	Generator Nameplate Rating:	MW	•
3.	Incinerator Information:		
	Dwell Temperature:		°F
	Dwell Time:		seconds
ł	Incinerator Afterburner Temperature:		°F

3	of	3
~	OI.	•

No. 4 Lime Kiln

B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Heat Input Rate:		140	mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr		tons/day
3.	Maximum Process or Throughp	out Rate:	See Comme	ent
4.	Maximum Production Rate:			
5.	Requested Maximum Operating	Schedule:		
	24	hours/day	7	days/week
	52	weeks/year	8,760	hours/year
6.	Operating Capacity/Schedule Co	·	·	
6.	Maximum Heat Input Rate based Maximum Process/Throughput F	l on 933 gal/hr of No. 6	fuel oil and 150	,000 Btu/gal.

C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

List of Applicable Regulations

- 62-296.320(4)(a) General Pollutant Emission Limiting Standards 62-296.320(4)(b) General Pollutant Emission Limiting Standards 62-296.404(2)(b) Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-296.404(3)(e) Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-296.404(4)(b) Lime Kilns and Calciners 62-296.404(4)(f) Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-296.404(5)(a) Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-296.404(5)(b) Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-296.404(6)(a) Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-296.404(6)(b) Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-296.404(6)(c)2. Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-296.404(6)(d) Kraft (Sulfate) Pulp Mills and Tall Oil Plants 62-297.310 General Test Requirements 62-297.401(1)(a) EPA Method 1 - Sample and Velocity Traverses for Stationary Sources 62-297.401(2) EPA Method 2 - Determination of Stack Gas Velocity and Volumentric Flow Rate 62-297.401(3) EPA Method 3 - Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight
- 62-297.401(4) EPA Method 4 Determination of Moisture Content in Stack Gases
- 62-297.401(5) EPA Method 5 Determination of Particulate Emissions from Stationary Sources
- 62-297.401(7) EPA Method 7 Determination of Nitrogen Oxide Emissions from Stationary Sources
- 62-297.401(7)(e) EPA Method 7E Determination of Nitrogen Oxide Emissions from Stationary Sources
- 62-297.401(8) EPA Method 8 Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
- 62-297.401(10) EPA Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources
- 62-297.401(16) EPA Method 16 Semicontinuous Determination of Sulfur Emissions from Stationary Sources
- 62-297.401(16)(a) EPA Method 16A Determination of Total Reduced Sulfur Emissions from **Stationary Sources**
- 62-297.401(25) EPA Method 25 Determination of Total Gaseous Nonmethane Organic Emissions as Carbon
- 62-297.401(25)(a) EPA Method 25A Determination of Total Gaseous Organic Concentration Using a Flame Ionization Detector
- 40 CFR 63 Subpart MM NESHAPs for Chemical Recovery Combustion Sources, Kraft, Soda, Sulfite, and Stand Alone Semi-Chemical Pulp Mills

D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

Identification of Point on P Flow Diagram? 017	lot Plan or	2. Emission P	oint Type Code:	
Descriptions of Emission P 100 characters per point): 4. ID Numbers or Description				
	·	<u>.</u>		
5. Discharge Type Code:	6. Stack Heig		7. Exit Diameter:	
V		131 feet	4.4	feet
8. Exit Temperature:	9. Actual Vol	umetric Flow	10. Water Vapor:	
170 °F	Rate:		34	%
		4,000 acfm		
11. Maximum Dry Standard Flo 45,853		12. Nonstack E	mission Point Height: fe	eet
13. Emission Point UTM Coord	linates:		<u>.</u> .	-,- -
Zone: E	ast (km):	Nort	h (km):	
14. Emission Point Comment (1	imit to 200 chara	acters):		
Maximum Dry Standard Flow		,		

E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

<u>Se</u>	gment Description and Ra	ate: Segment	1 of 2				
1.	1. Segment Description (Process/Fuel Type) (limit to 500 characters):						
} } !	Pulp and Paper and Wood Products, Sulfate (Kraft) Pulping, Lime Kiln: General						
2.	Source Classification Cod 3-07-001-06	e (SCC):	3. SCC Units:	ied Unbleached Pulp Produced			
4.	Maximum Hourly Rate: 118	5. Maximum 675,250		6. Estimated Annual Activity Factor:			
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:			
10.	. Segment Comment (limit	to 200 characters	s):	<u> </u>			
	Maximum annual rate is ba (monthly average).	ised on maximum	a daily rate of 1,8	50 tons/day ADUP			
Seg	gment Description and Ra	ite: Segment 2	of 2				
1.	Segment Description (Proc	cess/Fuel Type)	(limit to 500 cha	racters):			
	In-Process Fuel Use: Resid	lual Oil, Lime Kiln	1				
2.	Source Classification Code 3-90-004-03	e (SCC):	3. SCC Units: Thousand Gallo	ns Burned			
	Maximum Hourly Rate: 0.933	5. Maximum A 8,173	Annual Rate:	6. Estimated Annual Activity Factor:			
7.	. Maximum % Sulfur: 8. Maximum % Ash: 9. Million Btu per SCC Unit 150						
10.	Segment Comment (limit t	o 200 characters)):				
	Residual oil may include No	o. 6 fuel oil and o	n spec used oil.				

F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

Ţ		1
2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
053		EL
053		EL
	053	EL
		NS
	053	Device Code 053 053 053

Emissions Unit Information Section	3	of	3
Pollutant Detail Information Page	1	of	7

No. 4 Lime Kiln

Particulate Matter -- Total

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

1.	Pollutant Emitted:	2. Total Percent Efficiency of Control:
ļ	PM	,
3.	Potential Emissions:	4. Synthetically
	31.84 lb/hour	139.5 tons/year Limited? []
5.	Range of Estimated Fugitive Emissions:	
		to tons/year
6.	Emission Factor: 0.081 gr/dscf @ 10 percen	
	Reference: BACT	Method Code:
8.	Calculation of Emissions (limit to 600 chara	acters):
	0.081 gr/dscf x 45,853 dscf/min x 60 min/hr	r ÷ 7,000 gr/lb = 31.84 lb/hr
9.	Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 characters):
Al	lowable Emissions Allowable Emissions	<u>1</u> of <u>1</u>
1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
	0.081 gr/dscf @ 10 percent O ₂	31.84 lb/hour 139.5 tons/year
5.	Method of Compliance (limit to 60 characte	ers):
	Annual stack test using EPA Method 5.	
6.	Allowable Emissions Comment (Desc. of O	perating Method) (limit to 200 characters):
	Based on BACT.	

Emissions Unit Information Section	3	of _	3	No. 4 Lime Kilı
Pollutant Detail Information Page	2	of	7	Particulate Matter – PM₁

Potential/Fugitive Emissions

=						
1.	Pollutant Emitted:	2. Total Percent Efficiency of Control:				
	PM ₁₀					
3.	Potential Emissions:				4.	Synthetically
	31.84 lb/hour	13	9.5	tons/year		Limited? []
5.	Range of Estimated Fugitive Emissions:					
	[] 1 [] 2 [] 3			toto	ns/y	ear
6.	Emission Factor: 0.081 gr/dscf @ 10 percen	t O ₂			7.	
	Reference: BACT					Method Code: 0
8.	Calculation of Emissions (limit to 600 chara	cters):			
	PM ₁₀ limit based on PM emissions.					
9.	Pollutant Potential/Fugitive Emissions Commassume 100 percent of PM ₁₀ = PM	ment	(lim	it to 200 charac	ters;) :
Al	lowable Emissions Allowable Emissions	1	of_	1		
1.	Basis for Allowable Emissions Code: OTHER	2.		re Effective D	ate o	of Allowable
3.	Requested Allowable Emissions and Units:	4.	Equ	ivalent Allowa	ble I	Emissions:
	0.081 gr/dscf @ 10 percent O ₂		3	1.84 lb/hour		139.5 tons/year
5.	Method of Compliance (limit to 60 character	rs):				
	Annual stack test using EPA Method 5					
6.	Allowable Emissions Comment (Desc. of Open	 perat	ing N	1ethod) (limit t	o 20	0 characters):
	Based on BACT.					

Emissions Unit Information Section	3	of	3	No. 4 Lime Kiln
Pollutant Detail Information Page	3	of	7	Sulfur Dioxides

10	dential Pugitive Dinissions						
1.	Pollutant Emitted:	2. Total Percent Efficiency of Control:					
	SO₂	50%					
3.	Potential Emissions:		4. Synthetically				
	10.9 lb/hour	47.7 tons/year	Limited? []				
5.	Range of Estimated Fugitive Emissions:						
-		to to	ns/year				
0.	Emission Factor: 0.15 lb/ton ADUP		7. Emissions Method Code:				
	Reference: AP-42, Table 10.2-1		o Method Code:				
8.	Calculation of Emissions (limit to 600 chara	cters):					
	38,889 lb/hr (C _a O and inerts) x 0.90 lb CaO/lb = 72.9 ton/hr ADUP	÷ 2000 lb/ton x 1 ton AD	UP/0.24 tons CaO				
	72.9 ton/hr ADUP x 0.3 lb/ton ADUP x (1-0.5)	= 10.9 lb/hr					
9.	9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emission factor is based on 0.3 lb/ton ADUP and 50 percent control with Venturi scrubber.						
<u>Al</u>	lowable Emissions Allowable Emissions	1 of 1					
1.	Basis for Allowable Emissions Code: OTHER	2. Future Effective Da Emissions:	te of Allowable				
3.	Requested Allowable Emissions and Units:	4. Equivalent Allowal	ole Emissions:				
	0.15 lb/ton (ADUP)	10.9 lb/hour	47.7 tons/year				
5.	Method of Compliance (limit to 60 character	rs):					
	Annual stack test using EPA Method 8						
6.	Allowable Emissions Comment (Desc. of O	perating Method) (limit to	200 characters):				
	BACT. Requested Allowable Emissions base 50 percent control.	ed on 0.3 lb (SO₂)/ton (ADU	JP) and				

Emissions Unit Information Section _	3	of _	3	No. 4 Lime Kiln
Pollutant Detail Information Page	4	of	7	Nitrogen Oxides

	Taglette Extraorono					
1.	Pollutant Emitted:	2. To	ta	l Percent Effic	iency	of Control:
	NO _x					
3.	Potential Emissions:			-	4.	Synthetically
	95.2 lb/hour	417.1		tons/year		Limited? []
5.	Range of Estimated Fugitive Emissions:					
_				to to	ons/y	ear
6.	Emission Factor: 290 ppmvd at 10-percent	O ₂			7.	Emissions
	Reference: BACT					Method Code:
8.	Calculation of Emissions (limit to 600 chara	cters):		<u>-</u>		0
9.	290 ppmvd x 45,853 dscfm x 60 min/hr x 2 Pollutant Potential/Fugitive Emissions Com					
<u>Al</u>	lowable Emissions Allowable Emissions	<u>1</u> of		1		
1.	Basis for Allowable Emissions Code: OTHER	i .		re Effective D	ate o	f Allowable
3.	Requested Allowable Emissions and Units:	4. Ec	Įu:	ivalent Allowa	ble E	missions:
	290 ppmvd @ 10 percent O₂			95.2 lb/hour	4	117.1 tons/year
5.	Method of Compliance (limit to 60 character	·s):				
	Annual stack test using EPA Method 7 or 7E.					
6.	Allowable Emissions Comment (Desc. of Op	perating	N	lethod) (limit t	o 200	0 characters):
	BACT					

Emissions Unit Information Section	3	of	3	No. 4 Lime Kiln
Pollutant Detail Information Page	5	of	7	Carbon Monoxide

10	tentiabl'ugitive Dimissions			
1.	Pollutant Emitted:	2. Tota	l Percent Efficie	ency of Control:
	со			
3.	Potential Emissions:	<u> </u>		4. Synthetically
	13.8 lb/hour	60.4	tons/year	Limited? []
5.	Range of Estimated Fugitive Emissions:			
ļ	[] 1 [] 2 [] 3		to to	ons/year
6.	Emission Factor: 69 ppmvd at 10% O ₂			7. Emissions
	Reference: BACT			Method Code: 0
8.	Calculation of Emissions (limit to 600 chara	cters):		
	60 ppmvd x 45,833 dscfm x 60 min/hr x 2, 13.8 lb/hr.	116.8 lb _t /f	t ² x 28/1,545 ft-	lb ₄ lb _m -°R + 528°R =
9.	Pollutant Potential/Fugitive Emissions Com	ment (IIm	it to 200 charac	:ters):
<u>Al</u>	lowable Emissions Allowable Emissions	1 of	1	
1.	Basis for Allowable Emissions Code: OTHER	1	ure Effective Daissions:	ate of Allowable
3.	Requested Allowable Emissions and Units:	4. Equ	iivalent Allowa	ble Emissions:
	69 ppmvd at 10 percent O ₂		13.8 lb/hour	60.4 tons/year
5.	Method of Compliance (limit to 60 character	rs):		
	Annual stack test using EPA Method 10			
6.	Allowable Emissions Comment (Desc. of O	perating N	Method) (limit t	o 200 characters):
	BACT.			

Emissions Unit Information Section	3	of	3	No. 4 Lime Kiln
Pollutant Detail Information Page	6	of	7	Volatile Organic Compound

Potential/Fugitive Emissions	
1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
voc	
3. Potential Emissions:	4. Synthetically
21.1 lb/hour	92.4 tons/year Limited? []
5. Range of Estimated Fugitive Emissions:	
[] 1 [] 2 [] 3	totons/year
6. Emission Factor: 185 ppmvd @ 10 percent	
Reference: BACT	Method Code:
8. Calculation of Emissions (limit to 600 chara	
	1
185 ppmvd x 45,833 dscfm x 60 min/hr x 3	2,116.8 $lb_t/ft^2 \times 16/1,545 ft-lb_t/lb_m-R = 21.1 lb/hr$.
9. Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 characters):
-	, , , , , , , , , , , , , , , , , , , ,
VOC reported as CH₄.	
Allowable Emissions Allowable Emissions	<u>1</u> of <u>1</u>
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable
OTHER	Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
185 ppmvd @ 10 percent O₂	21.1 lb/hour 92.4tons/year
5. Method of Compliance (limit to 60 characte	rs):
Appual stack test using EDA Method 25 or 26	<u>-</u> Λ
Annual stack test using EPA Method 25 or 25	· · · · · · · · · · · · · · · · · · ·
6. Allowable Emissions Comment (Desc. of O	perating Method) (limit to 200 characters):
BACT	

Emissions Unit Information Section	3	of	3
Pollutant Detail Information Page		of	

No. 4 Lime Kiln

Total Reduced Sulfur

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1.	Pollutant Emitted:	2. Tota	il Percent Efficie	ency of Control:
	TRS	<u> </u> 		
3.	Potential Emissions:			4. Synthetically
	4.85 lb/hour	21.2	tons/year	Limited? []
5.	Range of Estimated Fugitive Emissions:			
<u> </u>	[] 1 [] 2 [] 3		to to	ns/year
6.	Emission Factor: 20 ppmvd @ 10 percent C)2		7. Emissions
	Reference: 62-296.404(3)(e)1.			Method Code: 0
8.	Calculation of Emissions (limit to 600 chara	icters):		
	20 ppmvd x 45,833 dscfm x 60 min/hr x 2,	,116.8 lb _r /i	t² x 34/1,545 ft-	ib _f /lb _m -°R = 21.1 lb/hr.
9.	Pollutant Potential/Fugitive Emissions Com	ment (lin	nit to 200 charac	ters):
	TRS as H₂S.			
<u>All</u>	iowable Emissions Allowable Emissions	1 of_	1	
1.	Basis for Allowable Emissions Code: RULE		ure Effective Daissions:	ate of Allowable
3.	Requested Allowable Emissions and Units:	4. Equ	iivalent Allowal	ole Emissions:
	20 ppmvd @ 10 percent O₂		4.85 lb/hour	21.2 tons/year
5.	Method of Compliance (limit to 60 characte	rs):		
	Annual stack test using EPA Method 16 or 16	6 A .		
6.	Allowable Emissions Comment (Desc. of O	perating l	Method) (limit to	o 200 characters):
	Rule 62-296-404(3)(e)1. Requested Allowable		, ,	, , , , , , , , , , , , , , , , , , ,

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H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>•</u>	isible Emissions Limitation: Visible Emissi	ons Limitation 1 of 1
1.	VE20	Basis for Allowable Opacity: X Rule Other
3.	Requested Allowable Opacity:	
	Normal Conditions: % Ex	sceptional Conditions: %
	Maximum Period of Excess Opacity Allowe	ed: min/hour
4.	Method of Compliance:	
5.	Visible Emissions Comment (limit to 200 c	haracters):
	Due to moisture interference, the visible emi Rule 62-296.320(4) is not applicable and is de	
<u>C</u>		NITOR INFORMATION Subject to Continuous Monitoring) Monitor 1 of 2
l.	Parameter Code: EM	2. Pollutant(s): TRS
3.	CMS Requirement:	[X] Rule [] Other
4.	Monitor Information:	
	Manufacturer: Thermal Environmental In	
<u> </u>	Model Number: Not available	Serial Number: Not available
5.	Installation Date: Dec 2000	6. Performance Specification Test Date:
7.	Continuous Monitor Comment (limit to 200	characters):
	Monitor information describes equipment in equipment as maintenance,	operation. GP reserves the right to replace this

H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u></u> '	sible Emissions Limitation: Visible Emissi		
1.	Visible Emissions Subtype:	2. Basis for Allowa	ıble Opacity
		[] Rule	Other
3.	Requested Allowable Opacity:		
	Normal Conditions: % Ex	ceptional Conditions:	%
	Maximum Period of Excess Opacity Allows	ed:	min/hour
<u> </u>			
4.	Method of Compliance:		
5.	Visible Emissions Comment (limit to 200 c	haracters):	
	I CONTRICTOR AND		
	I. CONTINUOUS MO		
	(Only Regulated Emissions Units	Subject to Continuo	us Monitoring)
<u>Co</u>		Subject to Continuo	us Monitoring)
	(Only Regulated Emissions Units	Subject to Continuo	us Monitoring)
1.	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O ₂	Subject to Continuo Monitor 2 of 2. Pollutant(s):	us Monitoring) 2
1.	(Only Regulated Emissions Units entinuous Monitoring System: Continuous	Subject to Continuo Monitor 2 of	us Monitoring)
3.	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O ₂	Subject to Continuo Monitor 2 of 2. Pollutant(s):	us Monitoring) 2
3.	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O ₂ CMS Requirement:	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule	us Monitoring) 2
3.	(Only Regulated Emissions Units entinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Insertions	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule	us Monitoring) 2 [] Other
 3. 4. 	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Ins Model Number: 320B Serial Installation Date:	Subject to Continuo Monitor2 of 2. Pollutant(s): [X] Rule strument, Inc. Number: Not available	us Monitoring) 2 [] Other
 3. 4. 5. 	(Only Regulated Emissions Units entinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Ins Model Number: 320B Serial Installation Date: Dec 2000	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule strument, Inc. Number: Not available 6. Performance Specific Specific Strument Specific Specific Strument Specific S	us Monitoring) 2 [] Other
 3. 4. 5. 	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Ins Model Number: 320B Serial Installation Date:	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule strument, Inc. Number: Not available 6. Performance Specific Specific Strument Specific Specific Strument Specific S	us Monitoring) 2 [] Other
 3. 4. 5. 	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Installation Date: Dec 2000 Continuous Monitor Comment (limit to 200	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule strument, Inc. Number: Not available 6. Performance Specharacters):	ecification Test Date:
 3. 4. 5. 	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Ins Model Number: 320B Serial Installation Date: Dec 2000 Continuous Monitor Comment (limit to 200 Rule 62-296.404(5)(a). Monitor information december 1.5 Page 1.5 Pa	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule strument, Inc. Number: Not available 6. Performance Special characters: escribes equipment in	ecification Test Date:
 3. 4. 5. 	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Installation Date: Dec 2000 Continuous Monitor Comment (limit to 200	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule strument, Inc. Number: Not available 6. Performance Special characters: escribes equipment in	ecification Test Date:
 3. 4. 5. 	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Ins Model Number: 320B Serial Installation Date: Dec 2000 Continuous Monitor Comment (limit to 200 Rule 62-296.404(5)(a). Monitor information december 1.5 Page 1.5 Pa	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule strument, Inc. Number: Not available 6. Performance Special characters: escribes equipment in	ecification Test Date:
 3. 4. 5. 	(Only Regulated Emissions Units ontinuous Monitoring System: Continuous Parameter Code: O2 CMS Requirement: Monitor Information: Manufacturer: Thermal Environmental Ins Model Number: 320B Serial Installation Date: Dec 2000 Continuous Monitor Comment (limit to 200 Rule 62-296.404(5)(a). Monitor information december 1.5 Page 1.5 Pa	Subject to Continuo Monitor 2 of 2. Pollutant(s): [X] Rule strument, Inc. Number: Not available 6. Performance Special characters: escribes equipment in	ecification Test Date:

3 of	3
------	---

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Supplemental Requirements

1.	Process Flow Diagram
	[] Attached, Document ID: [] Not Applicable [x] Waiver Requested
2.	Fuel Analysis or Specification
	[] Attached, Document ID: [] Not Applicable [X] Waiver Requested
3.	Detailed Description of Control Equipment
	[] Attached, Document ID: [] Not Applicable [x] Waiver Requested
4.	Description of Stack Sampling Facilities
	[] Attached, Document ID:[] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
	[] Attached, Document ID:
	[] Previously submitted, Date:
	[X] Not Applicable
6.	Procedures for Startup and Shutdown
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
7.	Operation and Maintenance Plan
	[] Attached, Document ID: [X] Not Applicable [] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[X] Attached, Document ID: Part B [] Not Applicable
9.	Other Information Required by Rule or Statute
	[] Attached, Document ID: [X] Not Applicable
10	. Supplemental Requirements Comment:

Emissions	Unit Inform	ation Section
E IIII 3 SI U II S	CONTRACTOR IN	анон эесион

No. 4 Lime Kiln

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11 Alternative Medicale CO and a
11. Alternative Methods of Operation
[] Attached, Document ID: [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[] Attached, Document ID: [X] Not Applicable
[] Mached, Bootiment 15 [X] Not Applicable
14. Compliance Assurance Monitoring Plan
[] Attached, Document ID: [X] Not Applicable
[\] Mached, Document ib [\times] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
13. Acid Rum Fait Application (Maid-copy Required)
[] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:
[] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:
Attached, Document ID
[] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:
[] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
· · · · · · · · · · · · · · · · · · ·
Attached, Document ID:
[] Phase II NO _x Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:
[] Phase NO _x Averaging Plan (Form No. 62-210.900(1)(a)5.)
1
Attached, Document ID:
[X] Not Applicable

PART B

SUPPLEMENTAL INFORMATION FOR CONSTRUCTION PERMIT APPLICATION

1.0 INTRODUCTION

Georgia-Pacific Corporation (G-P) operates a Kraft pulp and paper mill located in Palatka, Florida. The facility operates one recovery boiler, two smelt dissolving tanks, a lime kiln, as well as other equipment used in the pulp and paper production processes at the facility. The facility is currently operating under Title V permit no. 1070005-011-AV, issued January 29, 2002.

The G-P Palatka facility is a major source of hazardous air pollutants (HAPs) and is subject to U.S. Environmental Protection Agency's (EPA) final rule promulgated on January 12, 2001, to require maximum achievable control technology (MACT) on Kraft and soda pulp mill recovery furnaces, smelt dissolving tanks, lime kilns and calciners; sulfite recovery furnaces and fluidized bed combustors; and semi-chemical liquor combustors. This rule is commonly referred to as the MACT II regulation. The rule is codified in Title 40, Part 63, Subpart MM of the Code of Federal Regulations (CFR).

The MACT II emission limitations are summarized in Table 1. The MACT II regulations allow an alternative particulate matter (PM) limit to be established using a "bubble" over the regulated sources. G-P is proposing to utilize the bubble alternative for meeting the PM emission limitations of Subpart MM. The purpose of this application is to present G-P's proposed plan to meet the MACT II requirements.

This attachment contains two additional sections. A description of the proposed project, including air emission estimates, is presented in Section 2.0. The air quality review requirements and source applicability of the proposed project in relation to regulatory requirements are discussed in Section 3.0.

2.0 G-P'S PROPOSED BUBBLE PLAN FOR PARICULATE MATTER EMISSIONS

2.1 <u>BACKGROUND</u>

G-P operates a Kraft pulp and paper mill located in Palatka, Florida. The Mill consists of a batch digester system, multiple effect evaporator (MEE) system, condensate stripper system, recovery boiler and smelt dissolving tanks, lime kiln, tall oil plant, power boilers, and other equipment to produce finished paper products from virgin wood. The facility is currently operating under Title V permit no. 1070005-011-AV, issued January 29, 2002.

The affected MACT II sources at the G-P Mill consist of the No. 4 Recovery Boiler, the No. 4 Smelt Dissolving Tanks, and the No. 4 Lime Kiln. The MACT II PM emission limits applicable to these emissions units are as follows:

Emissions Unit	Particulate Matter Limit			
No. 4 Recovery Boiler	0.044 gr/dscf @ 8% O ₂			
No. 4 Smelt Dissolving Tanks	0.20 lb/ton BLS			
No. 4 Lime Kiln	0.064 gr/dscf @ 10% O ₂			

BLS = black liquor solids

gr/dscf = grains per dry standard cubic feet

Ref: 40 CFR 63.862(a)

However, G-P has the option to establish an alternative PM emission limit for each existing unit under a Mill-specific bubble (40 CFR 63.862(a)(1)(ii)). The use of the bubble requires demonstration by the applicant that the sum of the alternative emission limits for all affected sources will not exceed the sum of the individual PM emission limits for each source. The bubble can be utilized for all emission units operating more than 6,300 hours per year. Procedures for calculating the bubble limits are contained in 40 CFR 63.865(a).

2.2 BUBBLE PLAN

According to 40 CFR 63.865(a), the overall bubble limit is calculated in terms of pounds of PM per ton (lb/ton) of black liquor solids (BLS) fired in the recovery system. To determine the overall PM limit, the PM limits for the individual emissions units must be determined. The individual PM limits for recovery furnaces and lime kilns are calculated by using the volumetric gas flow out the stack, corrected to the appropriate oxygen content, and using the grain loadings, as listed in Section 2.1 (0.044 gr/dscf at 8 percent O₂ for recovery furnaces and 0.064 gr/dscf at 10 percent O₂ for lime kilns). For smelt dissolving tanks, the individual PM limit is calculated based on the BLS firing rate to the recovery system and a factor of 0.20 lb/ton BLS.

For the G-P Mill sources, the maximum volumetric flow rates to be used in the bubble calculation were determined be examining the last 5 years of stack test data. These data are presented in Table 2. As shown, there is year-to-year variability in the flow rates. In order to establish a maximum expected flow rate for each source, the 95 percent confidence level was determined. As shown, the estimated maximum flow rate for the No. 4 Recovery Boiler is 325,677 dry standard cubic feet per

minute (dscfm) at 8 percent O₂. The estimated maximum flow rate for the No. 4 Lime Kiln is 45,853 dscfm at 10 percent O₂.

3

The calculated MACT II PM bubble limit for the G-P Mill is presented in Table 3. As shown, the bubble limit for PM is calculated to be 1.61 lbs/ton BLS.

G-P proposes to meet the overall PM limit by limiting the individual sources to the limits shown in Table 3. For the No. 4 Recovery Boiler, the proposed individual PM limit is 0.030 gr/dscf at 8 percent O₂. This grain loading is the same as in the current Title V permit for the G-P Mill.

For the No. 4 Smelt Dissolving Tanks, the proposed individual limit is 0.12 lb/ton BLS. This limit is also the same as in the current Title V permit for the G-P Mill.

For the No. 4 Lime Kiln, the proposed individual PM limit is 0.081 gr/dscf at 10 percent O₂. This grain loading is also the same as in the current Title V permit for the G-P Mill.

As shown in Table 3, these individual PM limits will result in an overall PM limit of 1.22 lb/ton BLS, which is lower than the calculated bubble limit of 1.61 lb/ton BLS. Therefore, the requirements of 63.865(a) will be met by G-P.

3.0 RELATION TO OTHER REGULATORY REQUIREMENTS

3.1 PREVIOUS BACT EMISSION LIMITS

The No. 4 Recovery Boiler, No. 4 Smelt Dissolving Tanks, and the No. 4 Lime Kiln emission units were previously subject to prevention of significant deterioration (PSD) review, and underwent best available control technology (BACT) analysis. The BACT emission limits for PM, established during the PSD review process, are compared to the proposed bubble limits in Table 3. The associated air flow rates used in the PSD permitting process are also shown (294,000 dscfm for the Recovery Boiler, and 37,400 dscfm for the Lime Kiln).

As shown, the previous BACT limits for the recovery boiler and the lime kiln were set on the basis of grain loading. G-P is not proposing to change the grain loading limits established as BACT. However, the associated hourly emission rates are higher due to the higher air flow rates now experienced by the Recovery Boiler and Lime Kiln. For this reason, G-P is also requesting that the

previous PSD permits be modified to reflect the higher hourly PM emission rates for the No. 4 Recovery Boiler and the No. 4 Lime Kiln.

G-P is not requesting any change to the No. 4 Smelt Dissolving Tanks BACT emission rate for PM.

3.2 OTHER SUBPART MM REQUIREMENTS

Subpart MM establishes emission standards, and requirements for monitoring, performance tests, recordkeeping and reporting for all affected sources. The requirements in Subpart MM must be complied with by March 13, 2004. These requirements are discussed in the following sections.

Subpart MM establishes emission standards for HAP metals and gaseous organic HAPs. Subpart MM regulates PM emissions as a surrogate parameter for HAPs. Method 5 or 29 in Appendix A of 40 CFR 60 must be used to determine compliance with this emission standard. No standards for gaseous organic HAP emissions from existing sources were established in Subpart MM.

Under Subpart MM, any recovery boiler, lime kiln, or smelt dissolving tank that is equipped with a wet scrubber (i.e., No. 4 Smelt Dissolving Tanks and No. 4 Lime Kiln) must be equipped with a continuous monitoring system that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period. The monitoring device used to continuously monitor the pressure drop across the scrubber must be certified by the manufacturer to be accurate within a gauge pressure of ±500 pascals. The continuous monitoring device used to monitor the scrubber flow rate must be certified by the manufacturer to be accurate within ±5 percent of the design scrubbing liquid flow rate. As required by Subpart MM, initial performance tests will be conducted to determine compliance. During these initial performance tests, the operating range for the monitored parameters will be established.

Recovery boilers or lime kilns equipped with an electrostatic precipitator (ESP) control device (*i.e.*, No. 4 Recovery Boiler) must install a continuous opacity monitoring system. The system must determine opacity at least once every successive 10-second period and calculate and record each successive 6-minute average opacity.

Under Subpart MM, G-P is required to develop and implement a startup, shutdown, and malfunction (SSM) plan. This plan will contain the specific procedures to be followed for operating and maintaining the sources during periods of startup, shutdown, and malfunction. The plan also needs to

include a program for corrective action for malfunctioning control systems used to comply with the standards of Subpart MM. The plan must also include procedures for responding to any process parameter that is inconsistent with previously established operating ranges. This includes procedures to determine and record the cause of the exceedance, the time that the exceedance began and ended, and corrective actions to be taken. Maintenance and inspection schedules must also be included in the startup, shutdown, and malfunction plan.

Following the compliance date, owners or operators of all affected sources are required to implement corrective action as specified in the startup, shutdown, and malfunction plan when any 3-hour average parameter value is outside the established operating range. Records must be maintained of any occurrence when corrective action is required.

The following records are also required for sources affected by Subpart MM standards:

- Records of parameter monitoring data, including any time that the operating parameters
 were inconsistent with established operating ranges with brief explanations of the cause, the
 time the deviation occurred, the corrective action taken, and the time corrective action was
 initiated and completed;
- Records and documentation of supporting calculations made for compliance determinations;
 and
- Records of monitoring parameter ranges established for each affected source.

As required by Subpart MM, G-P is subject to certain notification requirements of 40 CFR 63, Subpart A. These requirements include an initial notification to the enforcement authority. This notification must include the following information:

- The name and address of the owner or operator;
- The physical address of the affected source;
- Identification of the applicable standard and the source's compliance date;
- A brief description of the nature, size, design and method of operation of the source, including design capacity and identification of the HAP emission point(s); and
- A statement of whether the source is a major source or an area source.

The initial notification for the G-P mill was previously submitted to the Florida Department of Environmental Protection. Notification of performance tests 60 days prior to the testing, continuous monitoring performance evaluations, and compliance status are also required under Subpart A.

continuous monitoring performance evaluations, and compliance status are also required under Subpart A.

In addition to the reporting requirements of Subpart A, G-P is required to submit an excess emissions report on a quarterly basis for any 3-hour average parameter that is outside of the established operational range. If no exceedance occurred during the reporting period, then a semi-annual report stating that no exceedance occurred must be submitted.

As part of this project, G-P will implement the appropriate systems and procedures to comply with all Subpart MM standards by March 13, 2004. All required records will be maintained and reports will be submitted in a timely manner as required to maintain compliance.

Table 1. Emission Limits for Existing Kraft and Soda Mills, Georgia-Pacific Corp., Palatka Mill

Source Type		articulate Matter	Gaseous Organics	
Kraft and soda recovery furnace				
Existing	0.044	gr/dscf @8 % O2	No limits	
New	0.015	gr/dscf @8 % O2	0.025 lb/ton BLS	
Smelt dissolving tank				
Existing	0.2	lb/ton BLS	No limit	
New	0.12	lb/ton BLS	No limit	
Lime Kiln				
Existing	0.064	dscf@10% O2	No limit	
New	0.01	dscf@10% O2	No limit	
Sulfite recovery unit				
Existing	0.04	gr/dscf @8 % O2	Covered by MACT I	
New	0.02	gr/dscf @8 % O2	Covered by MACT I	
Semi-chemical unit				
Existing and New		No limit	2.97 lb/ton BLS or	
			90% reduction	

Source: 40 CFR 63, Subpart MM.

Table 2. Volumetric Air Flow During Compliance Stack Tests, Georgia-Pacific, Palatka Florida

Compliance	No. 4 I	No. 4 Recovery Boiler		No. 4 Lime Kiln		
Test Date			dscfm @			dscfm
	dscfm	% O ₂	8% O ₂	dscfm	% O ₂	@10% O ₂
1998	190,000	3.30	258,692	27,000	6.50	35,591
1999	190,000	4.00	248,462	29,000	6.50	38,227
2000	240,167	4.59	303,165	34,862	7.55	42,627
2001	218,991	4.30	281,319	34,086	7.00	43,383
2002	216,429	4.90	268,039	29,399	6.60	38,486
2003	242,261	4.50	307,485	35,302	8.20	41,079
Mean			277,860			39,899
Standard deviati	on		23,908			2,977
95% C. L.ª			325,677			45,853

Note: dscfm = dry standard cubic feet per minute

^a 95% C. L. = 95 percent confidence level value = Mean + (Std. Dev. x 2)

Table 3. Proposed MACT II Bubble Limits for PM. Georgia-Pacific, Palatka, Florida

Emission Unit	Limit	Activity Factor	Equivalent PM Emissions	
			lb/hr	lb/ton BLS
	<u>PM M</u>	ACT II Limits 4		
No. 4 Recovery Boiler	0.044 gr/dscf @ 8% () ₂	325,677 dscfm	122.83	1.17
No. 4 Smelt Dissolving Tanks	0.20 lb/ton BLS	105 tons/hr BLS	21.00	0.20
No. 4 Lime Kiln	0.064 gr/dscf @ 10% O ₂	45,853 dscfm	25.15	0.24
Total		-	168.98	1.61
	РМ Ргоро	sed Bubble Limits ^a		
No. 4 Recovery Boiler	0.030 gr/dscf @ 8% O ₂	325,677 dscfm	83.75	0.80
No. 4 Smelt Dissolving Tanks	0.12 lb/ton BLS	105 tons/hr BLS	12.60	0.12
No. 4 Lime Kiln	0.081 gr/dscf @ 10% O ₂	45,853 dscfm	31.84	0.30
Total		-	128.18	1.22
	<u> </u>	ACT Limits ^c		·
No. 4 Recovery Boiler	$0.030~{\rm gr/dscf}$ @ 8% ${\rm O}_2$	294,000 dsefm	75.6	0.72
No. 4 Smelt Dissolving Tanks	0.12 lb/ton BLS	105 tons/hr BLS	12.6	0.12
No. 4 Lime Kiln	0.081 gr/dscf @ 10% O ₂	37,400 dscfm	26.0	0.25
Total		-	114.17	1.09

^a Activity factors for the No. 4 Recovery Boiler and the No. 4 Lime Kiln reflect proposed revision to the maximum volumetric flow rate for these units.

^b Black figuor solids (BLS) rate is based on the permit limit of 210,000 lb/hr BLS for the No. 4 Recovery Boiler.

^e Based on: No. 4 Recovery Boiler: permit No. AC54-266676/PSD-FL-226, dated Sep. 21, 1995.

No. 4 Smelt Dissolving Tanks: permit No. AC54-193841/PSD-FL-171, dated June 7, 1991.

No. 4 Lime Kiln: permit No. AC54-192551/PSD-FL-171, dated June 7, 1991.