



Palatka Pulp and Paper Operations
Consumer Products Division

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

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MAY 30 2003

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,

Myra J. Carpenter
Environmental Superintendent

tk

Enclosure

cc: W. M. Jernigan, w/o enc.
T. Wyles, w/o enc.
S. Matchett, w/o enc.

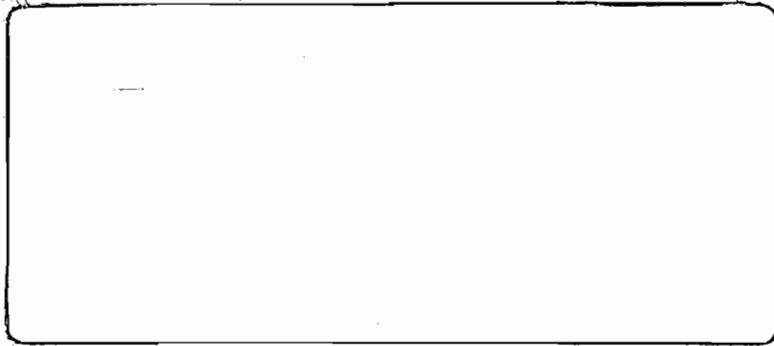
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STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHEAST DISTRICT

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STATE OF FLORIDA
DEPT. OF ENV. PROTECTION
NORTHEAST DISTRICT



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MAY 30 2003

BUREAU OF AIR REGULATION

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

May 2003
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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

Identification of Facility

1. Facility Owner/Company Name: Georgia-Pacific Corporation	
2. Site Name: Palatka Mill	
3. Facility Identification Number: 1070005 [] Unknown	
4. Facility Location: Street Address or Other Locator: North of CR 216; West of US 17 City: Palatka County: Putnam Zip Code: 32177	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: Myra Carpenter, Superintendent of Environmental Affairs	
2. Application Contact Mailing Address: Organization/Firm: Georgia-Pacific Corporation Street Address: P.O. Box 919 City: Palatka State: FL Zip Code: 32178-0919	
3. Application Contact Telephone Numbers: Telephone: (386) 325 - 2001 Fax: (386) 328 - 0014	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	5-30-03
2. Permit Number:	1070005-021-AC
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: _____

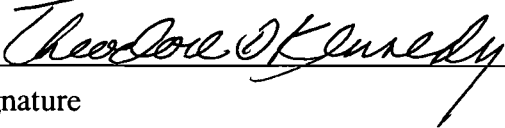
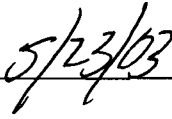
Reason for revision: _____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- 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>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.</i>  Signature  Date

* Attach letter of authorization if not currently on file.

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

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.

Signature

David A. Buff

Date

5/14/03

(seal)

* Attach any exception to certification statement.

Scope of Application

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

Application Processing Fee

Check one: Attached - Amount: \$: _____ 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**

Application Comment

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input checked="" type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> 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 Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
PM	A				Particulate Matter – Total
PM ₁₀	A				Particulate Matter – PM ₁₀
SO ₂	A				Sulfur Dioxide
NO _x	A				Nitrogen Oxides
CO	A				Carbon Monoxide
VOC	A				Volatile Organic Compounds
SAM	A				Sulfuric Acid Mist
TRS	A				Total Reduced Sulfur
HAPs	A				Total Hazardous Air Pollutants
H001	A				Acetaldehyde
H021	B				Beryllium Compounds
H043	A				Chloroform
H095	A				Formaldehyde
H106	A				Hydrochloric Acid
H115	A				Methanol

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input checked="" type="checkbox"/> Attached, Document ID: <u>Part B</u> _____ <input type="checkbox"/> Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> 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: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input checked="" type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> 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

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): No. 4 Recovery Boiler</p>			
<p>4. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: 018 <input type="checkbox"/> ID Unknown</p>			
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date:</p>	<p>7. Emissions Unit Major Group SIC Code: 26</p>	<p>8. Acid Rain Unit? <input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p>			

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Electrostatic Precipitator

2. Control Device or Method Code(s): **10**

Emissions Unit Details

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

**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 Throughput 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 Comment (limit to 200 characters):		
<p>Maximum heat input rate and throughput rates are 24-hr averages. Maximum heat input rate based on 6,084 Btu/lb BLS. Maximum Process Rate: 5,040,000 lb/day BLS.</p>		

**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 Volumetric 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 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
- 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

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? 018		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 230 feet	7. Exit Diameter: 12 feet	
8. Exit Temperature: 425 °F	9. Actual Volumetric Flow Rate: 447,000 acfm	10. Water Vapor: 21 %	
11. Maximum Dry Standard Flow Rate: 325,677 dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): Maximum Dry Standard Flow Rate is at 8 percent O₂.			

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

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Pulp and Paper and Wood Products, Sulfate (Kraft) Pulping, Recovery Furnace/Indirect Contact Evaporator.		
2. Source Classification Code (SCC): 3-07-001-10		3. SCC Units: Tons Air-dried Unbleached Pulp Produced
4. Maximum Hourly Rate: 118	5. Maximum Annual Rate: 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): Maximum annual rate is based on maximum daily rate of 1,850 tons/day ADUP (monthly average).		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): External Combustion Boilers; Industrial: Residual Oil		
2. Source Classification Code (SCC): 1-02-004-01		3. SCC Units: Thousand Gallons 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): 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)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	010		EL
PM ₁₀	010		EL
SO ₂			EL
NO _x			EL
CO			EL
VOC			EL
SAM			EL
TRS			EL
HAPs			NS
H001			NS
H021	010		NS
H095			NS
H106			NS
H115			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 83.75 lb/hour 366.8 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.030 gr/dscf @ 8 percent O₂ Reference: BACT		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 0.030 gr/dscf x 325,677 dscfm x 60 min/hr ÷ 7,000 gr/lb = 83.75 lb/hr			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.030 gr/dscf @ 8 percent O₂		4. Equivalent Allowable Emissions: 83.75 lb/hour 366.8 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Methods 5, 17, or 29.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on Title V permit and PSD permit limit.			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 83.75 lb/hour 366.8 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.030 gr/dscf @ 8 percent O₂ Reference: BACT		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): PM₁₀ limit equal to PM limit.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.030 gr/dscf @ 8 percent O₂		4. Equivalent Allowable Emissions: 83.75 lb/hour 366.8 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Methods 5, 17, or 29.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 121.7 lb/hour		4. Synthetically Limited? [] 533.2 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 75 ppmvd @ 8 percent O₂ Reference: Permit Limit		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $75 \text{ ppmvd} \times 325,677 \text{ dscfm} \times 60 \text{ min/hr} \times 2,116.8 \text{ lb/ft}^3$ $\times 64/1,545 \text{ ft-lb/lb}_m \cdot ^\circ\text{R} \div 528^\circ\text{R} = 121.7 \text{ lb/hr}$			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 75 ppmvd @ 8 percent O₂		4. Equivalent Allowable Emissions: 121.7 lb/hour 533.4 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 8			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 186.7 lb/hour 817.5 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 80 ppmvd @ 8 percent O₂ Reference: BACT		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 80 ppmvd x 325,677 dscfm x 60 min/hr x 2,116.8 lb_f/ft² x 46/1,545 ft-lb_f/lb_m-°R ÷ 528°R = 186.7 lb/hr			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 80 ppmvd @ 8 percent O₂		4. Equivalent Allowable Emissions: 186.7 lb/hour 817.5 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 7 or 7E.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:
3. Potential Emissions: 1,135.9 lb/hour 2,487.6 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 800 ppmvd @ 8 percent O₂ Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): CO limit of 800 ppmvd (3-hour average) and 400 ppmvd (24-hour average) based on BACT. $800 \text{ ppmvd} \times 325,677 \text{ dscfm} \times 60 \text{ min/hr} \times 2,116.8 \text{ lb}_f/\text{ft}^3$ $\times 28/1,545 \text{ ft-lb}_f/\text{lb}_m\text{-}^\circ\text{R} \div 528^\circ\text{R} = 1,135.9 \text{ lb/hr}$	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 800 ppmvd at 8 percent O₂, 3 hr	4. Equivalent Allowable Emissions: 1,135.9 lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 10	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code:	
8. Calculation of Emissions (limit to 600 characters):			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 400 ppmvd at 8 percent O₂, 24 hour		4. Equivalent Allowable Emissions: lb/hour 2,487.6 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 10			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 31.5 lb/hour 138 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.3 lb/ton (BLS) Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.30 lb/ton BLS x 105 TPH BLS = 31.5 lb/hr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.30 lb/ton (BLS)	4. Equivalent Allowable Emissions: 31.5 lb/hour 138 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 25 or 25A	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SAM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 3.3 lb/hour 14.7 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.81 ppmvd Reference: Permit limit	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): $0.81 \text{ ft}^3/10^6 \text{ ft}^3 \times 447,000 \text{ acf/min} \times 2,116.8 \text{ lb/ft}^2 \times 98 \text{ lb (H}_2\text{SO}_4\text{)/lb} \cdot \text{mol (H}_2\text{SO}_4\text{)} \div 1,545.3 \text{ ft} \cdot \text{lb/lb}_m \cdot \text{R} \div 860^\circ\text{R} \times 60 \text{ min/hr} = 3.3 \text{ lb/hr}$	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.81 ppmvd	4. Equivalent Allowable Emissions: 3.3 lb/hour 14.7 tons/year
5. Method of Compliance (limit to 60 characters): NCASI 106	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: TRS	2. Total Percent Efficiency of Control:
3. Potential Emissions: 19.4 lb/hour 53.1 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 11.2 ppmvd @ 8 percent O₂ Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): $11.2 \text{ ft}^3/10^6 \text{ ft}^3 \times 325,677 \text{ ft}^3/\text{min} \times 60 \text{ min/hr} \times 2,116.8 \text{ lb/ft}^2 \times \text{lb}\cdot\text{mol}^\circ\text{R}/1,545.3 \text{ ft}\cdot\text{lb} \times 34 \text{ lb (H}_2\text{S)/lb}\cdot\text{mol (H}_2\text{S)} \div 528^\circ\text{R} = 19.4 \text{ lb/hr}$	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 11.2 ppmvd @ 8 percent O₂	4. Equivalent Allowable Emissions: 19.4 lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 16 or 16A	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT (maximum 12-hour average).	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: TRS		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code:	
8. Calculation of Emissions (limit to 600 characters):			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 7.0 ppmvd @ 8 percent O₂		4. Equivalent Allowable Emissions: lb/hour 53.1 tons/year	
5. Method of Compliance (limit to 60 characters): Continuous monitor for TRS			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: H021		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.00064 lb/hour		4. Synthetically Limited? <input type="checkbox"/>	
		0.0028 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.5 lb/10¹² Btu Reference: Permit Limit		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 0.5 lb/10¹² Btu x 210,000 lb/hr BLS x 6,084 Btu/lb BLS = 0.00064 lb/hr			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Pollutant: Beryllium. Permit limit is 0.00064 lb/hr.			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.5 lb/10¹² Btu		4. Equivalent Allowable Emissions: 0.00064 lb/hour 0.0028 tons/year	
5. Method of Compliance (limit to 60 characters): Stack test using EPA Method 103 or 104 every 5 years.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT.			

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Annual VE test using EPA Method 9.	
5. Visible Emissions Comment (limit to 200 characters): BACT	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): TRS
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Thermal Environmental Instrument, Inc. 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.	

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

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: _____ % Exceptional Conditions: _____ % Maximum Period of Excess Opacity Allowed: _____ min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
 (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: O₂	2. Pollutant(s):
3. CMS Requirement:	[<input checked="" type="checkbox"/>] Rule [] Other
4. Monitor Information: Manufacturer: Thermal Environmental Instrument, Inc. Model Number: 320B Serial Number: Not available	
5. Installation Date: Dec 2000	6. Performance Specification Test Date:
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.	

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

Supplemental Requirements

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

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NO _x Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NO _x Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input checked="" type="checkbox"/> 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) <input checked="" type="checkbox"/> 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). <input type="checkbox"/> 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. <input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one) <input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. <input type="checkbox"/> 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 Identification Number: [] No ID ID: 019 [] ID Unknown			
5. Emissions Unit Status Code: A	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 26	8. Acid Rain Unit? []
9. Emissions Unit Comment: (Limit to 500 Characters) <p style="text-align: center;">Emissions unit consists of two smelt dissolving tanks with a Venturi scrubber on each tank.</p>			

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Venturi scrubbers; one for each smelt dissolving tank

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
Incinerator Afterburner Temperature:	°F

**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 Throughput 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 Comment (limit to 200 characters):	<p>BLS feed to the No. 4 Recovery Boiler as a 24-hr average.</p>	

**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 Volumetric 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 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
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 Point 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 Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 206 feet	7. Exit Diameter: 5 feet	
8. Exit Temperature: 170 °F	9. Actual Volumetric Flow Rate: 40,000 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): 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)

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Pulp and Paper and Wood Products, Sulfate (Kraft) Pulping, Smelt Dissolving Tank: General.		
2. Source Classification Code (SCC): 3-07-001-05		3. SCC Units: Tons Air-dried Unbleached Pulp Produced
4. Maximum Hourly Rate: 118	5. Maximum Annual Rate: 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): Maximum annual rate is based on maximum daily rate of 1,850 tons/day ADUP (monthly average).		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum 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):		

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
SO ₂			NS
NO _x			NS
VOC			NS
TRS	053		EL
HAPs			NS
H095			NS
H115			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 12.6 lb/hour		4. Synthetically Limited? [] 55.2 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.12 lb/ton BLS Reference: BACT		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): PM limit based on Title V permit and PSD permit. 0.12 lb/ton BLS x 105 tons/hr BLS = 12.6 lb/hr			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.12 lb/ton BLS		4. Equivalent Allowable Emissions: 12.6 lb/hour 55.2 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 5.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT.			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 12.6 lb/hour		4. Synthetically Limited? [] 55.2 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.12 lb/ton BLS Reference: BACT		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): PM₁₀ limit based on PM emissions and BACT.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.12 lb/ton BLS		4. Equivalent Allowable Emissions: 12.6 lb/hour 55.2 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 5			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour _____ tons/year _____		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code:	
8. Calculation of Emissions (limit to 600 characters):			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 12.6 lb/hr		4. Equivalent Allowable Emissions: 12.6 lb/hour 55.2 tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: TRS		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 3.4 lb/hour		4. Synthetically Limited? []	
		14.9 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to _____ tons/year			
6. Emission Factor: 0.048 lb/3000 lb BLS Reference: 62.296.404(3)(d)1.		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): 0.048 lb/3,000 lb BLS x 210,000 lb/hr BLS = 3.4 lb/hr			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.048 lb/3000 lb BLS		4. Equivalent Allowable Emissions: 3.4 lb/hour 14.9 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 16 or 16A			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 62-296.404(3)(d)1.			

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): <p align="center">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).</p>	

I. CONTINUOUS MONITOR INFORMATION
 (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Foxboro Model Number: 2803-SABA-TSA-G Serial Number: 5252373	
5. Installation Date: 01 Dec 1976	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): <p align="center">Monitor information describes equipment in operation. G-P reserves the right to replace this equipment as maintenance may require.</p>	

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

Supplemental Requirements

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

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation

 Attached, Document ID: _____ Not Applicable

12. Alternative Modes of Operation (Emissions Trading)

 Attached, Document ID: _____ Not Applicable

13. Identification of Additional Applicable Requirements

 Attached, Document ID: _____ Not Applicable

14. Compliance Assurance Monitoring Plan

 Attached, Document ID: _____ 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: _____ 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) <input checked="" type="checkbox"/> 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). <input type="checkbox"/> 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. <input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one) <input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. <input type="checkbox"/> 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 Lime Kiln			
4. Emissions Unit Identification Number: [] No ID ID: 017 [] ID Unknown			
5. Emissions Unit Status Code: A	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 26	8. Acid Rain Unit? []
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
Incinerator Afterburner Temperature:	°F

**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 Throughput Rate:	See Comment	
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 Comment (limit to 200 characters):		
	<p>Maximum Heat Input Rate based on 933 gal/hr of No. 6 fuel oil and 150,000 Btu/gal. Maximum Process/Throughput Rate: 82,986 lb/hr (CaCO₃ and inerts).</p>	

**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 Volumetric 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

1. Identification of Point on Plot Plan or Flow Diagram? 017		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 131 feet	7. Exit Diameter: 4.4 feet	
8. Exit Temperature: 170 °F	9. Actual Volumetric Flow Rate: 64,000 acfm	10. Water Vapor: 34 %	
11. Maximum Dry Standard Flow Rate: 45,853 dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): Maximum Dry Standard Flow Rate is @ 10 percent O₂			

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

Segment Description and Rate: Segment 1 of 2

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 Code (SCC): 3-07-001-06		3. SCC Units: Tons Air-dried Unbleached Pulp Produced
4. Maximum Hourly Rate: 118	5. Maximum Annual Rate: 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): Maximum annual rate is based on maximum daily rate of 1,850 tons/day ADUP (monthly average).		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): In-Process Fuel Use: Residual Oil, Lime Kiln		
2. Source Classification Code (SCC): 3-90-004-03		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 0.933	5. Maximum Annual Rate: 8,173	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): Residual oil may include No. 6 fuel oil and on spec used oil.		

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
SO ₂		053	EL
NO _x			EL
CO			EL
VOC			EL
TRS			EL
PB			NS
HAPs			NS
H001			NS
H095			NS
H115			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 31.84 lb/hour 139.5 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.081 gr/dscf @ 10 percent O₂ Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.081 gr/dscf x 45,853 dscf/min x 60 min/hr ÷ 7,000 gr/lb = 31.84 lb/hr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.081 gr/dscf @ 10 percent O₂	4. Equivalent Allowable Emissions: 31.84 lb/hour 139.5 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 5.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on BACT.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM₁₀	2. Total Percent Efficiency of Control:
3. Potential Emissions: 31.84 lb/hour 139.5 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.081 gr/dscf @ 10 percent O₂ Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): PM₁₀ limit based on PM emissions.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Assume 100 percent of PM₁₀ = PM	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.081 gr/dscf @ 10 percent O₂	4. Equivalent Allowable Emissions: 31.84 lb/hour 139.5 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 5	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on BACT.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO₂	2. Total Percent Efficiency of Control: 50%
3. Potential Emissions: 10.9 lb/hour	4. Synthetically Limited? [] 47.7 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.15 lb/ton ADUP Reference: AP-42, Table 10.2-1	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): $38,889 \text{ lb/hr (C}_2\text{O and inerts)} \times 0.90 \text{ lb CaO/lb} \div 2000 \text{ lb/ton} \times 1 \text{ ton ADUP} / 0.24 \text{ tons CaO} = 72.9 \text{ ton/hr ADUP}$ $72.9 \text{ ton/hr ADUP} \times 0.3 \text{ lb/ton ADUP} \times (1-0.5) = 10.9 \text{ lb/hr}$	
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.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.15 lb/ton (ADUP)	4. Equivalent Allowable Emissions: 10.9 lb/hour 47.7 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 8	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT. Requested Allowable Emissions based on 0.3 lb (SO₂)/ton (ADUP) and 50 percent control.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 95.2 lb/hour 417.1 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year			
6. Emission Factor: 290 ppmvd at 10-percent O₂ Reference: BACT		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 290 ppmvd x 45,853 dscfm x 60 min/hr x 2,116.8 lb_r/ft² x 46/1,545 ft-lb_r/lb_m-°R = 95.2 lb/hr. <i>= 528</i>			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 290 ppmvd @ 10 percent O₂		4. Equivalent Allowable Emissions: 95.2 lb/hour 417.1 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 7 or 7E.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 13.8 lb/hour		4. Synthetically Limited? [] 60.4 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 69 ppmvd at 10% O₂ Reference: BACT		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): 60 ppmvd x 45,833 dscfm x 60 min/hr x 2,116.8 lb_f/ft² x 28/1,545 ft-lb_f/lb_m-°R + 528°R = 13.8 lb/hr.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 69 ppmvd at 10 percent O₂		4. Equivalent Allowable Emissions: 13.8 lb/hour 60.4 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 10			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT.			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 21.1 lb/hour 92.4 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year			
6. Emission Factor: 185 ppmvd @ 10 percent O₂ Reference: BACT		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $185 \text{ ppmvd} \times 45,833 \text{ dscfm} \times 60 \text{ min/hr} \times 2,116.8 \text{ lb}_p/\text{ft}^3 \times 16/1,545 \text{ ft-lb}_m/\text{lb}_m\text{-}^\circ\text{R} = 21.1 \text{ lb/hr.}$ <div style="text-align: right;"><i>≈ 528</i></div>			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): VOC reported as CH₄.			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 185 ppmvd @ 10 percent O₂		4. Equivalent Allowable Emissions: 21.1 lb/hour 92.4tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 25 or 25A			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: TRS	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4.85 lb/hour 21.2 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 20 ppmvd @ 10 percent O₂ Reference: 62-296.404(3)(e)1.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 20 ppmvd x 45,833 dscfm x 60 min/hr x 2,116.8 lb_f/ft² x 34/1,545 ft-lb_f/lb_m-°R = 21.1 lb/hr.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): TRS as H₂S.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 20 ppmvd @ 10 percent O₂	4. Equivalent Allowable Emissions: 4.85 lb/hour 21.2 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test using EPA Method 16 or 16A.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Rule 62-296-404(3)(e)1. Requested Allowable Emissions based on 12-hour average.	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): <p align="center">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).</p>	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): TRS
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Thermal Environmental Instrument, Inc. 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): <p align="center">Monitor information describes equipment in operation. GP reserves the right to replace this equipment as maintenance,</p>	

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

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: _____ % Exceptional Conditions: _____ % Maximum Period of Excess Opacity Allowed: _____ min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: O ₂	2. Pollutant(s):
3. CMS Requirement:	[X] Rule [] Other
4. Monitor Information: Manufacturer: Thermal Environmental Instrument, Inc. Model Number: 320B Serial Number: Not available	
5. Installation Date: Dec 2000	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): Rule 62-296.404(5)(a). 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 <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: Part B _____ <input type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

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

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 BACKGROUND

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 by 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.

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	Particulate Matter	Gaseous Organics
Kraft and soda recovery furnace		
Existing	0.044 gr/dscf @8 % O ₂	No limits
New	0.015 gr/dscf @8 % O ₂	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% O ₂	No limit
New	0.01 dscf @10% O ₂	No limit
Sulfite recovery unit		
Existing	0.04 gr/dscf @8 % O ₂	Covered by MACT I
New	0.02 gr/dscf @8 % O ₂	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 Test Date	No. 4 Recovery Boiler			No. 4 Lime Kiln		
	dscfm	% O ₂	dscfm @ 8% O ₂	dscfm	% O ₂	dscfm @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 deviation			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 ^b
<u>PM MACT II Limits^a</u>				
No. 4 Recovery Boiler	0.044 gr/dscf @ 8% O 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
<u>PM Proposed Bubble Limits^a</u>				
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>BACT Limits^c</u>				
No. 4 Recovery Boiler	0.030 gr/dscf @ 8% O ₂	294,000 dscfm	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 liquor solids (BLS) rate is based on the permit limit of 210,000 lb/hr BLS for the No. 4 Recovery Boiler.

^c 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.