Georgia-Pacific

Structural Panels - Eastern Plywood Group
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FAX COVER SHEET

DATE	TOTAL PAGES (Including Cover Sheet)
2 December 2004	6

TO	FAX NUMBER
Jonathan Holtom, P.E.	(850)921-9533

COMPANY	LOCATION
Florida DEP	Jacksonville, Florida

FROM
Johnnie Temples on behalf of Margarete Vest

COMMENTS:

RE: GP Hawthorne RTO Parameter Issue

Permit #: 1070015-004-AV
According to paragraph 3 of the following October 5th, 2000 letter, it appears that we have the flexibility to test and operate at a temperature 50 degrees below setpoint. Also, attached is data in which we tested the Hawthorne Plywood plant RTO at lower temperatures and submitted showing that the facility can operate at a lower temperature and remain compliant with the 90% DRE. Please consider this in your evaluation.

IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL (352) 481-4311

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 28 2000

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Mr. Paul J. Vasquez, Manager
Environmental Engineering - Wood Products
Georgia Pacific Corporation
133 Peachtree Street NE
P.O. Box 105605
Atlanta, Georgia 30348-5605

OCT -5 2000

Dear Mr. Vasquez:

EPA has reviewed the information in your May 19, 2000, letter to Laxmi Kesari providing an explanation to several questions that were posed in a meeting on March 8, 2000, concerning changes to the parametric monitoring plan for your Phase I facilities. You requested these changes as part of your annual report on the parametric monitoring system as provided for in the Consent Decree.

As discussed in a conference call on June 13, 2000, we approve of changing the airflow measurement for the RTO from ACFM to SCFM at the Skippers OSB facility. We also approve use of the maximum average airflow as demonstrated in the 3 1-hr tests as the measure for the maximum RTO outlet airflow but do not agree to your proposal to set the airflow parameter at an additional 10% to the maximum average tested airflow.

Relative to the residence chamber temperature parameter, you have stated that you will maintain the set point temperatures as established, but to compensate for the temperature differential due to thermocouple sensitivity as described in your letter, and the possibility from time to time that one or more 12-hour block average periods could be as much as 50°F below the set point, we approve of a minimum average temperature (as measured in the RTO chamber during the 12-hour period) of no more than 50°F below the set point. We accept this inasmuch as you have tested at these lower temperatures and demonstrated the DRE is achieved as required at the Phase I facilities with plans to continue these demonstrations at most of the Phase II facilities. You have indicated that compliance testing for the Phase II facilities is currently underway. Changes to temperature set points, minimum average temperatures or air flows listed below will be adopted subject to submittal of performance test results indicating compliance with operation at the given parameters.

According to the PMS plan descriptions approved by EPA for the Phase I facilities, the following were the approved compliance parameters initially*:

Facility	Min. RTO Operating Temperature (°F)	Set Temp. °F	Stack Gas Flow Rate (Max.Avg.) ACFM
Hawthorne, FL	1470	1500	68,894
Madison, GA	1575	1625	96,085
Skippers, VA	1500	1550	256,130

*both parameters to be expressed as a 12-hour block average calculated from the readings taken and recorded every 15 minutes.

The following are the reevaluated parameters based on the data provided and your proposed changes which were presented in your annual report delivered to us in February, 2000. As discussed above, we approve of the increased maximum average flow as demonstrated in your test during 1999 and the change of measurement of the flow for Skippers in terms of SCFM rather than ACFM.

Facility	Min. RTO Operating Temperature (°F)	Set Temp. °F	RTO Maximum Outlet Airflow ACFM (SCFM)
Hawthorne, FL Plywood	1500	1508	55,738
Madison, GA Plywood	1600	1625	111,136
Skippers, VA OSB	1500	1550	(218,159)

Relative to the Phase II facilities (all plywood), the following are the approved parameter values based on the plans submitted.

Facility	Min. RTO Operating Temperature (°F)	Set Temp. °F	RTO Maximum Outlet Airflow ACFM (SCFM)
Monticello, GA	1580	1600	116,286
Talladega, AL	~~1575~~ 1525 * PAY	1575	67,810
Peterman, AL	~~1500~~ 1480°F * PAY	~~1550~~ 1505 PAY * SEE ATTACHED E-MAIL FROM LINDA LAY.	64,485
Louisville, MS	1480	1505	55,794
Taylorsville, MS	1480	1500	89,383
Dudley, NC	1525	1575	83,195
Crossett, AR Plant 1	1500	1550	81,935
Plant 2	1525	1575	80,405
Fordyce, AR	1500	1550	66,671

As stated previously, reporting of deviations from the compliance parameters, i.e., below the minimum operating temperature and/or in excess of the stack gas flow rates (both expressed as the 12-hour block averages) should be included in the consent decree quarterly reports. These reports should provide both temperature and flow for all deviation periods. In addition, future summaries of Compliance Test results of VOC emissions should include the RTO chamber minimum operating temperature as recorded during the test as well as the stack gas flow rates and VOC concentrations.

If you have any questions, please contact Linda Lay of my staff on (202) 564-8577.

Sincerely,

Richard Biondiff

Bruce C. Buckheit, Director
Air Enforcement Division

cc: Dianne Shawley, USDOJ

and/or washdowns of the RTO, if necessary. Monitoring the position of the isolation dampers will be helpful in documenting when gases from a veneer dryer are vented to the atmosphere.

IV. MONITORING

In this proposed monitoring approach, two parameters are monitored and rely on a previous demonstration that destruction efficiency would remain comfortably above the 90% destruction efficiency levels as long as the RTO retention chamber temperature remains above the proposed appropriate operating criteria of 1500 °F and air flows below the proposed appropriate operating criteria of 72,026 ACFM. This approach does not attempt to predict a specific emission rate from the RTO. Instead, a threshold value called the appropriate operating criteria will be achieved and maintained to assure maintenance of the required destruction efficiency.

The RTO temperature to be monitored is the average of temperatures taken by thermocouples located in the retention chamber of the RTO. The RTO retention chamber temperature is set to be maintained at 1508 °F. This temperature represents the temperature set point required to assure maintenance of the proposed appropriate operating criteria as determined by performance and compliance test results which will achieve the dual objective of providing adequate VOC destruction and acceptable CO and NOx emissions. A summary of the referenced test results can be found in **Attachment A** and **Attachment B.** Also, setting the RTO retention chamber temperature at 1508 °F and maintenance of a maximum average airflow of 72,026 ACFM, represents a worst case scenario for operating the veneer dryers. A worst case scenario is defined as a condition where all veneer dryers are on line and operating at maximum sustainable throughputs. Under these conditions, maximum heat input and airflows are required thus resulting in the maximum amount of VOCs emitted from the dryers and conveyed to the RTO. On the other hand, operating fewer dryers will result in relatively less VOC emissions and less airflow, thus increasing the retention time in the RTO and increasing its efficiency to destroy VOCs.

As noted above, setting of the appropriate operating criteria for the RTO's retention chamber temperature should also consider effectively controlling NOx and CO emissions to acceptable levels. High NOx and high CO emissions are proportionally related to high and low combustion temperatures, respectively. In the case of G-P's Hawthorne, Florida plywood plant, we found that at temperatures around 1508 °F resulted in VOC destruction efficiencies significantly higher than 90% while NOx and CO emissions were maintained at acceptable concentrations. However, monitoring of the RTO retention chamber temperature indicates that a temperature variation of +/- 50 F can be expected between the thermocouples. This temperature variation should be considered when determining the minimum operating temperature and the set point temperature to assure maintenance of the required destruction efficiency. Therefore, a minimum operating temperature of 1475 °F is proposed. It was also found during performance tests conducted by the RTO supplier that VOC destruction efficiencies higher than 90% can be achieved in the 1475 °F range and higher. This represents the minimum temperature at maximum airflow to ensure 90% VOC destruction efficiency.

Airflow is measured using a Brandt Air/Gas Flow Sensor (pitot tube) which has a 50-point flow calculation that gives the maximum differential pressure. This is based on the Classical Bernoulli Theory and RTO exhaust gas conditions. The unit has a 4% to 6% accuracy and a 0.3% to 0.5% repeatability. Refer to **Attachment E** for more information.

V. CORRELATION VERIFICATION

The appropriate operating criteria were established during the performance test conducted by the RTO supplier and verified during the compliance test(s) conducted on 7/2/97, 6/11/99 and 8/31 - 9/1/00. Subsequent verification of the appropriate operating criteria will be demonstrated with the stack test required to be conducted biennially in accordance with paragraph 18 of the Consent Decree. In addition, a less frequent test could be considered given the fact that the appropriate operating criteria for RTO retention chamber temperature is set at a minimum temperature and the RTO air flow to a maximum average airflow.

Parametric Monitoring System
CAA Section 114 Consent Decree
Hawthorne, Florida Plywood Facility

Attachment A

Hawthorne, Florida

Summary of Temperature Test Series

Pollutant Emissions Rates and Destruction Removal Efficiencies

Hawthorne, Florida Plywood Facility

29 August – 1 September 2000

Test Number and Location	Test Date and Time of Day	Concentration (ppm)	Volumetric Flowrate (DSCFM)	Emission Rate (lb./hr)	Destruction Efficiency (%)
1475 °F					
VOC Inlet	9/1/00	3868	20,994	151.9	
VOC Exhaust	08:43-13:00	113	19,108	4.00	97.1
Exhaust CO		115.4		9.60	
Exhaust NOx		2.82		0.389	
1500 °F					
VOC Inlet	8/30/00	3067	21,602	124.0	
VOC Exhaust	10:45 –	99.5	21,177	3.94	96.8
Exhaust CO	15:48	79.6		7.34	
Exhaust NOx		3.7		0.566	
1530 °F					
VOC Inlet	9/1/00				
VOC Exhaust	15:00-18:55	5351	21,921	219.2	97.0
Exhaust CO		163	19,449	5.87	
Exhaust NOx		33.4		2.88	
		1.9		0.270	
1550 °F					
VOC Inlet	8/31/00				
VOC Exhaust	09:25-14:16	5508	19,323	199.7	98.1
Exhaust CO		104	20,131	3.92	
Exhaust NOx		20.7		1.82	
		4.4		0.625	

Parametric Monitoring System
CAA Section 114 Consent Decree
Hawthorne, Florida Plywood Facility

Test Number and Location	Test Date and Time of Day	Concentration (ppm)	Volumetric Flowrate (ACFM)	Emission Rate (lb./hr)	Destruction Efficiency (%)
1600 °F					
VOC Inlet	8/31/00	4546	18,257	155.2	
VOC Exhaust	16:46-21:00	212	16,751	6.61	95.3
Exhaust CO		16.1		1.18	
Exhaust NOx		3.8		0.46	

III. Performance Criteria. :
There is probably a typographical error concerning the numbering of this section in the table. It should be III, instead of II.

Sections A. and E.; reference is made to recording the data manually at least once per day. The word "manually" should be removed from each sentence. They will be recorded, but GP may choose to use a recording device instead of manually recording the information in the future.

EMISSIONS UNIT 005 MONITORING APPROACH
Emissions Unit 005-RTO Table: Indicator No. 1- Page 6 of 8

III. Performance Criteria. :
There is probably a typographical error concerning the numbering of this section in the table. It should be III, instead of II.

Section D;(currently shown incorrectly as 'A'.)- Monitoring Frequency: GP requests that the block average be changed from a 12 hour period to a 24 hour period.

Section F:
G-P requests that the 12 hour average value be changed to a 24 hour average and that the airflow be included in the paragraph defining the averaging period.

The last sentence should read, "The 24 hour average is the value used to verify compliance with the minimum operational temperature of 1475F and maximum airflow of 72,026 acfm." The last portion of this sentence was inadvertently left off the CAM plan originally submitted.

G-P is available to work and meet with you as necessary so that we are in agreement with the final plan and we look forward to reviewing a final draft if possible. Thank you very much.

Sincerely,

Leon Pinner
Plant Manager

Christopher L. Kirts, P.E.
FDEP District Air Program Administrator
RE: Georgia-Pacific Corporation-Hawthorne Plywood Plant
Title V Permit No: 1070015-004-AV
August 27, 2004

Jonathan Holtom

COMPLIANCE ASSURANCE MONITORING REQUIREMENTS

Condition 5. Commencement of Operation: The condition references 40 cfr 64.7 (a) but does not show it in its entirety. The latter half of the citation that is missing states, *"or by such later date specified in the permit pursuant to §64.6(d)."* This gives the States latitude to allow for a period of time to begin monitoring requirements to allot for the time it takes to receive the permit by mail and also for the facility to implement the new requirement.

G-P requests the condition to read: ***The owner or operator shall begin conducting the monitoring required under this appendix within fifteen calendar days following the effective date of this Title V permit.***

NO Left out on purpose

Condition 7. Continued Operation:

Concerning the operation of the Dryer RTO, EPA stated in Section IV of the 1996 Consent Decree paragraph A.11., that the 90% destruction efficiency of the RTO *"need not be maintained during periods when the dryer(s) are not operating or during previously scheduled startup and shutdown periods (including bakeouts and washouts), and Force Majeure events (including malfunctions which qualify as Force Majeure events)."* G-P requests that this description be included in this permit condition to read:

"Except for, as applicable, monitoring malfunctions, associated repairs, required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), scheduled startup and shutdown (including bake-outs and wash-outs), and force majeure events, the owner or operator shall conduct all monitoring in continuous operation , or shall collect data at all required intervals, at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, required quality assurance or control activities, scheduled startup and shutdown (including bake-outs and wash-outs), and force majeure events shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use...."

NO

EMISSIONS UNIT 001 MONITORING APPROACH

Emissions Unit 001-ESP Table: Indicator No. 1 - Page 6 of 8

Georgia-Pacific Corporation

Georgia-Pacific Hawthorne Plywood Facility
223 GORDON CHAPEL ROAD
HAWTHORNE, FL 32640
Telephone: 1-386-481-0433
Fax: 1-352-481-4915

Christopher L. Kirts, P.E.
District Air Program Administrator
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, FL 32256-7590

April 16, 2004

RE: Georgia-Pacific Corporation
Hawthorne Plywood Plant
Title V Permit No: 1070015 –004-AC
Air Permit Renewal RAI

Dear Mr. Kirts:

Thank you very much for granting Georgia-Pacific Corporation Hawthorne (G-P) the extension for our response in short notice. This is greatly appreciated.

In response to your Request for Additional Information for the Title V Air Permit Renewal, G-P provides the following:
In reference to your statement concerning our request for a change to the RTO testing frequency and that EPA would have to review the request, please contact our permit engineer, Mrs. Vest, by phone or email, to discuss what is involved with making this request to EPA. Does this request require G-P to provide additional information? Will this create a problem for the FDEP? Should G-P separate this request out from this renewal process?

In reply to your request for reports submitted to EPA, G-P has attached copies of Annual Reports submitted to EPA dated January 2000 and January 2002. A report was not sent to EPA in 2001 because G-P was waiting for approval of parametric standards.

Concerning your request for temperature RATA, checks were made of the thermocouples and are reported in the attached Annual Reports. Checks were made of the temperature set-point and the actual thermocouple readings. The RTO retention chamber thermocouples are replaced annually with new thermocouples as part of the RTO routine maintenance operations and therefore additional calibration is not needed. EPA did not require the RATA. G-P performed the flow rata for the purposes of monitoring efficiency.

Please call Margarete Vest at cell 904-445-8761, office 386-312-1191, or email at mmvest@gapac.com or Johnnie Temples at 386-481-0433 if you have any questions or need any additional information.

Sincerely,

Martin Shorey
Plant Manager

cc: Johnnie Temples
Margarete M. Vest, P.E.

GEORGIA-PACIFIC CORPORATION HAWTHORNE, FL
RTO PARAMETRIC MONITORING ASSESSMENTS 2002 TO 2003

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne Fl. **DATE 2/10, 2/11/2003**

1. **Parametric Monitoring reports accurate**

   STATUS: Complete. The reports were checked and appear to be complete and accurate. All parameters are within range.

   ACTION TAKEN: No further action needed.

2. **Abort conditions tracked for compliance with conditions of Parametric Plan**

   STATUS: Complete. The plant does a good job documenting the downtime and entering it as required.

   ACTION TAKEN: No further action needed.

3. **Maintenance tasks performed on time**

   STATUS: Complete. The maintenance task list is the most current and all tasks are completed in the proper frequency.

   ACTION TAKEN: No further action needed.

4. **Malfunction log kept for RTO**

   STATUS: Complete. There is a malfunction log kept in the control room, and it is being utilized to track malfunctions.

   ACTION TAKEN: No further action needed.

   Calibration on Flow meter

   STATUS: Complete. The flow meter was found to be in calibration.

   ACTION TAKEN No Further action needed

5. **Air flow traverse done and error %**

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and inclined manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 4.50% average error, with the flow meter reading slightly lower than the actual pitot tube velocities. The allowable error is 15% and the error is well less than the allowable. There will be a Flow RATA done later this year as part of the required compliance testing.

   ACTION TAKEN: No Further action needed

6. **System Cycle times**

STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

ACTION TAKEN: No Further action needed

7. **Thermocouple reading / traceable measurement**

STATUS: Complete. The readings were less than 1-% error from the actual readings.

T.C. 1 System – 1500 Actual – 1510 Error – 0.70%

T.C. 2 System – 1506 Actual – 1516 Error – 0.67%

T.C. 3 System – 1529 Actual – 1527 Error – -0.15%

Average error % for all thermocouples is 0.4%, which is well within the allowable of 1% error

ACTION TAKEN: No further action needed at this time.

8. **Inlet Static pressure / Set point**

STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.5" and the setpoint was –2.5"w.c.

ACTION Needed: No further action needed at this time.

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne Fl. **DATE 8/27, 8/28/2002**

1. **Parametric Monitoring reports accurate**

   STATUS: Complete. The reports were checked and appear to be complete and accurate. All parameters are within range.

   ACTION TAKEN: No further action needed.

2. **Abort conditions tracked for compliance with conditions of Parametric Plan**

   STATUS: Complete. The plant does a good job documenting the downtime and entering it as required.

   ACTION TAKEN: No further action needed.

3. **Maintenance tasks performed on time**

   STATUS: Complete. The maintenance task list is the most current and all tasks are completed in the proper frequency.

   ACTION TAKEN: No further action needed.

4. **Malfunction log kept for RTO**

   STATUS: Complete. There is a malfunction log kept in the control room, and it is being utilized to track malfunctions.

   ACTION TAKEN: No further action needed.

   Calibration on Flow meter

   STATUS: Complete. The flow meter was found to be in calibration.

   ACTION TAKEN No Further action needed

5. **Air flow traverse done and error %**

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and inclined manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 4.15% average error, with the flow meter reading slightly lower than the actual pitot tube velocities. The #3 dryer is down for maintenance, therefore the flows are slightly lower than normal. The system is more accurate at the higher flows. The allowable error is 15% and the error is well less than the allowable.

   ACTION TAKEN: No Further action needed

6. **System Cycle times**

STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

ACTION TAKEN: No Further action needed

7. **Thermocouple reading / traceable measurement**

STATUS: Complete. The readings were less than 1-% error from the actual readings.

T.C. 1 System – 1513 Actual – 1518 Error – 0.33%

T.C. 2 System – 1507 Actual – 1520 Error – 0.84%

T.C. 3 System – 1510 Actual – 1490 Error – -1.31%

Average error % for all thermocouples is 0.05%, which is well within the allowable of 1% error

ACTION TAKEN: No further action needed at this time.

8. **Inlet Static pressure / Set point**

STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.4" and the setpoint was –2.5"w.c.

ACTION Needed: No further action needed at this time.

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne Fl. **DATE 1/23, 1/24/2002**

1. **Parametric Monitoring reports accurate**

   STATUS: Complete. The reports were checked and appear to be complete and accurate, however there were no reports for the shutdown period over the Christmas holiday while the plant was not operating.

   ACTION TAKEN: Note to the file stating that the plant was not operating during this period.

2. **Abort conditions tracked for compliance with conditions of Parametric Plan**

   STATUS: Complete. I did not locate any abort conditions that were not tracked and properly reported as required by the permit conditions or the Parametric Plan requirements.

   ACTION TAKEN: No further action needed.

3. **Maintenance tasks performed on time**

   STATUS: Complete. The maintenance tasks are properly identified and completed within the required frequency.

   ACTION TAKEN: No further action needed.

4. **Malfunction log kept for RTO**

   STATUS: Complete. There is a malfunction log kept in the control room, and it is being utilized to track malfunctions.

   ACTION TAKEN: No further action needed.

5. **Retention Chamber Temperature/ setpoint**

   STATUS: Complete. These readings are instantaneous readings, and do reflect the averages. The setpoint is 1508 and the temperature average when I viewed it was 1516.

   ACTION TAKEN: No Further action needed.

6. **Calibration on Flow meter**

STATUS: Complete. The flow meter was found to be in calibration.

ACTION TAKEN No Further action needed

7. **Air flow traverse done and error %**

STATUS: Complete. Air flow traverse readings were done using a pitot tube and digital manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 4.9% average error, with the flow meter reading slightly lower than the actual pitot tube velocities.

ACTION TAKEN: No Further action needed

8. **System Cycle times**

STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

ACTION TAKEN: No Further action needed

9. **Thermocouple reading / traceable measurement**

STATUS: Complete. The readings were less than 1% error from the actual readings.

ACTION TAKEN: No further action needed at this time.

10. **Inlet Static pressure / Set point**

STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.52" and the setpoint was –2.5"w.c.

ACTION TAKEN: No Further action needed

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne Fl. **DATE 5/20, 5/21/2002**

1. **Parametric Monitoring reports accurate**

   STATUS: Complete. The reports were checked and appear to be complete and accurate.

   ACTION TAKEN: No further action needed.

2. **Abort conditions tracked for compliance with conditions of Parametric Plan**

   STATUS: Complete. I did not locate any abort conditions that were not tracked and properly reported as required by the permit conditions or the Parametric Plan requirements.

   ACTION TAKEN: No further action needed.

3. **Maintenance tasks performed on time**

   STATUS: Complete. The maintenance tasks are properly identified and completed within the required frequency.

   ACTION TAKEN: No further action needed.

4. **Malfunction log kept for RTO**

   STATUS: Complete. There is a malfunction log kept in the control room, and it is being utilized to track malfunctions.

   ACTION TAKEN: No further action needed.

5. **Retention Chamber Temperature/ setpoint**

   STATUS: Complete. These readings are instantaneous readings, and do reflect the averages. The setpoint is 1508 and the temperature average when I viewed it was 1516.

   ACTION TAKEN: The setpoint on burners was 1508 and the setpoint on injectors was 1515. This was adjusted to a setpoint on injectors of 1508, which is the setpoint that is listed in the Parametric plan.

Calibration on Flow meter

STATUS: Complete. The flow meter was found to be in calibration.

ACTION TAKEN No Further action needed

6. **Air flow traverse done and error %**

STATUS: Complete. Air flow traverse readings were done using a pitot tube and digital manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 2.07% average error, with the flow meter reading slightly lower than the actual pitot tube velocities.

ACTION TAKEN: No Further action needed

7. **System Cycle times**

STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

ACTION TAKEN: No Further action needed

8. **Thermocouple reading / traceable measurement**

STATUS: Complete. The readings were less than 1-% error from the actual readings.

Tower 1 System – 1512 Actual – 1526 Error – 0.93%

Tower 2 System – 1497 Actual – 1512 Error – 0.99%

Tower 3 System – 1533 Actual – 1541 Error – 0.54%

ACTION TAKEN: No further action needed at this time.

9. **Inlet Static pressure / Set point**

STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.4" and the setpoint was –3.0"w.c. This is due to the Static transmitter needing to be replaced during the next downtime. The plant noticed that the airflow had started to drop, and the fugitives from the dryers to increase. This led to the investigation and subsequent discovery that the transmitter was sending a higher signal that the actual pressure and allowing the fan speed to decrease. The plant is monitoring closely and making adjustments as needed to compensate until the July 4th shutdown.

ACTION Needed: The static transmitter needs to be replaced or recalibrated during the July 4th shutdown.

FEBRUARY 2000 ANNUAL REPORT

Georgia-Pacific Corporation

133 Peachtree Street NE (30303)
P.O. Box 105605
Atlanta, Georgia 30348-5605
Telephone (404) 652-4000

February 4, 2000

Director
Air Enforcement Division
Office of Enforcement & Comp. Assurance
U. S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, DC 20044

Mr. Laxmi Kesari
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., NW
Room 3117 C
Washington, DC 20460

Chief
Environmental Enforcement Section
Environmental & National Resources Div.
U. S. Department of Justice
P. O. Box 7611
Ben Franklin Station
Washington, DC 20044

CERTIFIED MAIL No. Z 452 232 826
RETURN RECEIPT REQUESTED

RE: Annual Report on the Calibration and Reevaluation of Parametric Monitoring Devices Pursuant to Consent Decree; United States of America Vs. Georgia-Pacific Corporation, US District Court, North Georgia District, Civil Action No. 1 96-CV-1818-FMH

Dear Sir/Madam:

The enclosed annual report is prepared in compliance with Section IV, paragraph 29 of the above referenced Consent Decree.

The annual report presents information related to the calibration and reevaluation of the parametric monitoring devices at the Phase I facilities including Hawthorne, Florida Plywood; Madison, Georgia Plywood; and Skippers, Virginia OSB.

In addition, we would like to meet with Mr. Laxmi Kesari and his technical staff to review the attached annual report and discuss EPA's schedule for approving the parametric monitoring study report for the Phase II facilities. We had discussed the possibility of meeting in Washington the week of February 21, 2000. I will contact Mr. Kesari to arrange the meeting.

Should you have any questions regarding this progress report, please call me at (404) 652-7327.

Sincerely,

Paul J. Vasquez
Manager, Environmental Engineering
Wood Products
Georgia Pacific Corporation

Enclosures
cc: Ronald L. Paul
Peter H. Smith

Annual Report
Calibration and Reevaluation
Of the
Parametric Monitoring Devices and
Compliance Control Parameters

Georgia-Pacific Corporation

January 27, 2000

Annual Report
Parametric Monitoring System
Georgia-Pacific Corporation

Summary

The Parametric Monitoring System (PMS) plans for the Phase I facilities were approved by EPA on April 5, 1999. Phase I facilities include:

- Skippers, Virginia OSB
- Madison, Georgia Plywood
- Hawthorne, Florida Plywood

G-P's approved plan consists of monitoring the compliance control parameters of RTO retention temperature and RTO outlet airflow every 15 minutes and averaged every 12 hours, as well as the operational indicators of static pressure at the inlet of the ID fan and position of the isolation dampers. The approved appropriate operating criteria for the respective compliance control parameters were based on 1997 engineering and compliance tests of VOC emissions from RTOs at the referenced facilities. The resulting VOC destruction efficiencies and corresponding compliance control parameter data from the 1997 compliance tests for each phase I facility are summarized in Table 1 of this report.

In 1999, the biennial compliance tests for the Phase I facilities were conducted as required to reevaluate the parameters and devices used to monitor the parameters. Accordingly, adjustment to the compliance control parameters at each facility was made depending on the operating conditions. The resulting VOC destruction efficiencies and corresponding compliance control parameter data are summarized in Table 2 of this report.

Attachments A, B, and C summarize the engineering and compliance test results mentioned above.

Calibration and evaluation of the monitoring devices were also conducted, and adjustments made to insure their proper operation and reliability. **Attachment D** presents a summary of the assessments required in the PMS plan and conducted every 120 days.

The information presented in this annual report supports our criteria for proposing changes to the compliance control parameters for temperature and airflow. We have satisfactorily demonstrated that a minimum operating temperature of no more than 50 °F below the set point, and a maximum airflow of no more than 10% above the maximum tested airflow, are adequate control parameters to demonstrate compliance with the required 90% VOC destruction efficiency.

Table 1.- Summary of VOC Destruction Efficiencies and Corresponding Compliance Control Parameters - 1997

Facility	RTO Retention Chamber Set Temperature, °F	RTO Outlet Airflow, ACFM (SCFM)	VOC Destruction Efficiency, %	Production Rate, PLY 3/8"-SF/Hr (OSB Ton OD/Hr)
Hawthorne, FL Plywood Engineering Test 5/6/97	1508	71,518	99.56	46,439
Hawthorne, FL Plywood Compliance test 7/2/97	1509	70,881	98.45	47,811
Madison, GA Engineering test Plywood 3/5-7/97	1500 F 1550 F 1600 F Burner 1600 F NGI	55,800* 61,400 69,400 69,400	96.9 97.6 98.9 98.3	Not taken for engineering study
Madison, GA Engineering test Plywood 5/1/97	1600	141,239	96.9	Not taken for engineering study
Madison, GA Plywood Compliance test 6/27/97	1625	96,085	95.8	54,842
Skippers, VA OSB Engineering Test 5/19/97	RTO #1 – 1496 RTO #2 – 1498	RTO#1 and RTO#2 4*52,000	RTO #1 – 94.7 RTO #2 – 94.6	NA
Skippers, VA OSB Compliance Test 9/18/97	1550	259,050	94.3	34.0 OD tons/hr

Table 2.- Summary of VOC Destruction Efficiencies and Corresponding Compliance Control Parameters - 1999

Facility	RTO Retention Chamber Set Temperature, °F	RTO Outlet Airflow, ACFM (SCFM)	VOC Destruction Efficiency, %	Production Rate, PLY 3/8"-SF/Hr (OSB Ton OD/Hr)
Hawthorne, FL Plywood Compliance test 6/11/99	1508	54,532	99.75	44,835
Madison, GA Plywood Compliance test 6/10/99	1625	111,065	94.8	48,282
Skippers, VA OSB Compliance test 6/3/99	1550	298,369 (201,514)	92.5	33.5 OD tons/hr
Skippers, VA OSB Compliance test 12/15-17/99	1500	309,015 (203,670)	97.8	36.3 OD tons/hr
	1550	331,544 (218,159)	96.9	31.4 OD tons/hr

The temperatures presented in Tables 1 and 2 represent the retention chamber setpoint temperature in the RTO. The RTO outlet airflows represent the highest single run during each engineering and/or compliance test.

Evaluation and Calibration

Hawthorne, Florida Plywood

- The 5/6/97 engineering test was conducted by Air Consulting and Engineering, Inc. to verify and confirm the RTO retention chamber temperature settings recommended by the RTO manufacturer to demonstrate compliance with the required 90% VOC destruction efficiency. Please refer to **Attachment A** for details.
- The RTO retention chamber temperature set point of 1508 °F has been maintained since the engineering test of 5/6/97. There has been some instances when the RTO retention chamber temperature has gone above the set point temperature while operating on burners and/or in the fuel enhancement mode (i.e., natural gas is injected in the inlet of the RTO to increase the BTU content of the gases from the dryers). This increase in temperature appears to be directly related to the introduction of gases with high concentration of VOC and the RTO's slow cool down response time. Since the appropriate operating criteria for RTO retention chamber temperature is based on a minimum temperature, limited excursions above the set point do not represent compliance issues.
- The 7/2/97 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1509 °F. Although, SEC had recommended a set point of 1500 °F, G-P decided to set the temperature at 1509 °F. Maximum airflow was set at 70,881 ACFM.
- On 1/16/98, the required Parametric Monitoring System Study report was submitted to EPA for approval.
- Since developing PMS and installing its component January of 1998, the compliance control parameters and monitoring devices for the Hawthorne facility have performed well.
- From time to time, the RTO system will experience systematic problems that either cause an alarm and/or automatically puts the RTO in a shutdown mode.
- During the first months of trial and experimentation with the PMS, we experienced some problems with moisture trapped in the airflow meter sensing lines thus interfering with the meter's ability to measure airflow. The problem was corrected by installing an air dryer and a purging system. The purging system was later automated in April of 1999.
- The 6/11/99 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1509 °F. A maximum airflow was set at 54,532 ACFM. There have been some instances when the RTO retention chamber temperature has gone above the set point temperature. This increase in temperature, which occurred during the compliance test, appears to be directly related to the introduction of gases with high concentration of VOC and the RTO's slow cool-down response time. The average temperature reached 1538 °F with the RTO control temperature set at 1508 °F. As a result, the VOC destruction efficiency was 99.75%. This confirms that temperature above the set point is not a compliance issue.

Madison, Georgia Plywood

- The 3/5/97 engineering test was conducted by Air Techniques, Inc. at the request of the RTO manufacturer to determine the VOC destruction efficiencies at various RTO retention chamber temperature settings. Please refer to **Attachment B** for details.

- The 5/2/97 engineering test was conducted by Trigon Engineering, Inc. to verify and confirm the RTO retention chamber temperature settings recommended by the RTO manufacturer to demonstrate compliance with the required 90% VOC destruction efficiency.
- The RTO retention chamber temperature set point of 1,625 °F has been maintained since the engineering test of 5/2/97. There have been some instances when the RTO retention chamber temperature has gone above the set point temperature while operating. This increase in temperature appears to be directly related to the introduction of gases with high concentration of VOC and the RTO's slow response to cool.
- The 6/27/97 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1625 °F. Although, DURR Environmental had recommended a set point of 1550 °F, G-P decided to set the temperature at 1625 °F. Maximum airflow was set at 96,085 ACFM.
- On 1/16/98, the required Parametric Monitoring System Study report was submitted to EPA for approval.
- Since developing the PMS and installing its components in September of 1998, the compliance control parameters and monitoring devices for the Madison facility have performed well.
- From time to time, the RTO system will experience systematic problems that either cause an alarm and/or automatically puts the RTO in a shutdown mode.
- During the first months of trial and experimentation with the PMS, we experienced some problems with moisture trapped in the airflow meter sensing lines thus interfering with the meter's ability to measure airflow. The problem was corrected by installing an air dryer and a purging system. The purging system was later automated in March of 1999.
- The 6/10/99 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1625 °F. A maximum airflow was set at 111,065 ACFM.

Skippers, Virginia OSB

- The 5/19/97 engineering test was conducted by Smith Environmental Corporation to determine the minimum set point temperature to operate the RTOs. The results indicate that at 1496 °F in #1 RTO and 1498 °F in RTO#2, VOC destruction efficiencies above 90% can be achieved.
- The 7/23/97 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1550 °F. Although, SEC had recommended a set point of 1500 °F, G-P decided to set the temperature at 1550 °F to allow a +/- 50 °F fluctuation to compensate for temperature differential due to thermocouple sensitivity and also due to RTO low response to cooling and heating periods. Maximum airflow for both RTOs was set at 259,050 ACFM.
- Since developing the PMS and installing its components in January of 1998, the compliance control parameters and monitoring devices, for most parts, have performed well.
- On 1/16/98, the required Parametric Monitoring System Study report was submitted to EPA for approval.
- After a few months of operation of the Parametric Monitoring System, we found that moisture was impacting the performance of the Brandt airflow meter causing us to purge the sensing lines more often than what the manufacturer had recommended. As this activity became time consuming, the manufacturer recommended automating the purging cycle, which corrected the problem with moisture interfering with the airflow meter. Automation was completed in April,

1999. Because of moisture interference, there were instances when airflows were erratic showing too low or too high airflows.

- On 3/15/99, at the request of Georgia-Pacific Corporation, SEC initiated a process to optimize the reliability of the RTO system, reduce the frequency of washouts, and correct potential safety problems. The evaluation process continued until the 6/3/99 compliance test was conducted. The changes resulted in improved VOC destruction efficiencies while the thermal efficiency decreased. The sporadic loss of heat associated with the on-line bake-out and cycle timing adjustment caused the RTO stack temperatures to fluctuate more than 80 F. This fluctuation resulted in large enough gas density variations to impact the accuracy of airflow measurement by the airflow meter. We corrected this situation by integrating gas temperature measurement into the meter's calculation equation. This was accomplished by placing new temperature compensated flow meters in the RTO stacks. As the RTO media has continued to age, however, RTO outlet temperatures have continued to rise. Consequently, the airflow when measured in ACFM at those higher temperatures has, on a few occasions, exceeded the maximum 12-hour average of 302,851 ACFM, which was established at an average stack temperature of 320 °F. In order to make a valid comparison of the actual airflows to the maximum 12-hour average, this temperature differential needs to be taken into account and the airflows need to be adjusted to a common temperature basis. To properly standardize the airflows and minimize the impact of outlet temperature variation, we are measuring airflow as wet standard cubic feet per minute (SCFM, wet). The new Brandt meter installed in September of 1999, has the built-in capability to do this without additional modification. The maximum 12-hour average airflow will also be converted to an equivalent SCFM (wet basis). These and other changes will be incorporated in the Skippers OSB Parametric Monitoring System plan. There were five 12-hour average periods in October and November that show an exceedance of the SCFM but well within the 10% over the maximum average airflow.
- The 6/3/99 test was the first biennial compliance test required by the Consent Decree to demonstrate compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1550 °F. Based on the compliance test results, a new maximum average airflow of 298,369 ACFM combined for both RTOs was determined and set as the new 12-hour average airflow. The new airflows were validated during the compliance test period.
- The 12/15-17/99 compliance tests report demonstrates that VOC destruction efficiencies can be achieved at RTO set point temperatures of 1500 °F and 1550 °F. This determination supports our original position to use +/- 50 °F fluctuation to compensate for temperature differential due to thermocouple sensitivity and also due to RTO low response to cooling and heating periods. However, G-P is committed to continue operating the RTOs at a set point of 1550 °F instead of 1500 °F. Airflow RATA test was also conducted during the 12/15-17/99 compliance test. A maximum total airflow was determined at 331,544 ACFM or 218,159 SCFM at the 1550 °F set point. The new airflows were validated during the compliance test period. The compliance test and airflow RATA results will be submitted to EPA by 2/15/00.

Conclusions

The following Table summarizes the new compliance control parameters.

Facility	RTO Retention Chamber Set Temperature, °F	RTO Retention Chamber Minimum Temperature, °F	RTO Outlet Airflow, ACFM (SCFM)	RTO Outlet Maximum Airflow, ACFM (SCFM)(2)
Hawthorne, FL Plywood	1508	1500 (1)	54,532	59,985.2
Madison, GA Plywood	1625	1600	111,065	122,171.5
Skippers, VA OSB	1550	1500	331,544 (218,159)	364,698.4 ( )

(1) An interim minimum operating temperature of 1500 °F has been set until a new compliance test is conducted later in 2000. The temperature of 1500 °F was selected based on test results obtained at the other plywood facilities in Phase II.

(2) Maximum air flow includes a 10% allowance based on inherent variability of manual airflow measurements using EPA Methods 1-4.

— 331,544 ACFM corresponds to 1550
— Test Airflow ~~for~~ @ 1500 is not reported here thus

ATTACHMENT A

Summary of Performance Test Results of VOC Emissions
Performed by Air Consulting & Engineering, Inc. - May 6, 1997

Hawthorne, Florida Plywood Facility

RTO Inlet Conditions

Run Number	1	2	3	4	Average
Stack Gas Flow Rate, ACFM	59454	64498	67767	67491	64803
VOC Lbs/hr	198.87	181.50	255.10	273.86	227.33

RTO Outlet Conditions

Run Number	1	2	3		Average
Stack Gas Flow Rate, ACFM	66310	68994	71518	68403	68806
VOC Lbs/hr	0.89	1.14	0.99	1.02	1.01

Calculation

The destruction efficiency was calculated by the following equation:

$$\text{Destruction Efficiency} = \frac{\text{Inlet (lbs./hr)} - \text{Outlet (lbs./hr)}}{\text{Inlet (lbs./hr)}}$$

	Inlet	Outlet	Destruction Efficiency, %
Total VOC, Lbs/hr	227.33	1.01	99.56

Source: Information taken from Source Test Report Preliminary Engineering Study dated May 6, 1997, prepared by ACE Inc.

ATTACHMENT A

Summary of Compliance Test Results of VOC emissions

Performed by Air Consulting & Engineering, Inc. - July 2, 1997

Hawthorne, Florida Plywood Facility

RTO Inlet Conditions

Run Number	1	2	3	Average
Stack Gas Flow Rate, ACFM	63,844	65,067	64,399	64,436
VOC Lbs/hr	238.7	231.46	208.72	226.29

RTO Outlet Conditions

Run Number	1	2	3	Average
Stack Gas Flow Rate, ACFM	67,850	67,953	70,881	68,894
VOC Lbs/hr	3.78	3.44	3.27	3.5

Calculation

The destruction efficiency was calculated by the following equation:

$$\text{Destruction Efficiency} = \frac{\text{Inlet (lbs./hr)} - \text{Outlet (lbs./hr)}}{\text{Inlet (lbs./hr)}}$$

	Inlet	Outlet	Destruction Efficiency, %
Total VOC, Lbs/hr	226.29	3.5	98.45

Source: Information taken from Source Test Report dated July 2, 1997, prepared by ACE Inc.

ATTACHMENT A

Summary of Compliance Test Results of VOC emissions

Performed by Technical Services, Inc. – June 11, 1999

Hawthorne, Florida Plywood Facility

RTO Inlet Conditions

Run Number	1	2	3	Average
Stack Gas Flow Rate, ACFM	44,479	44,994	42,604	44,025.67
VOC Lbs/hr	218.63	235.42	210.57	221.54

RTO Outlet Conditions

Run Number	1	2	3	Average
Stack Gas Flow Rate, ACFM	55,355	55,738	52,503	54,532
VOC Lbs/hr	0.67	0.34	0.34	0.45

Calculation

The destruction efficiency was calculated by the following equation:

$$\text{Destruction Efficiency} = \frac{\text{Inlet (lbs/hr)} - \text{Outlet (lbs/hr)}}{\text{Inlet (lbs/hr)}}$$

	Inlet	Outlet	Destruction Efficiency, %
Total VOC, Lbs/hr	221.54	0.45	99.80

Source: Information taken from Source Test Report dated June 11, 1999, prepared by Technical Services, Inc.

ATTACHMENTS B and C solely related to other Facilities. NO info is applicable to Hawthorne.

ATTACHMENT D

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne, Fl. **DATE 12/1 and 12/2/99**

1. Parametric Monitoring reports accurate

   STATUS: Complete. Reports were reviewed for completeness and accuracy.

   ACTION TAKEN: No Further action needed

2. Maintenance tasks performed on time

   STATUS: Complete. Reports were reviewed and dates verified.

   ACTION TAKEN: No Further action needed

3. Malfunction log kept for RTO

   STATUS: Complete. The log book was reviewed to determine that the malfunctions were documented as well as the corrective actions taken for the malfunctions.
   ACTION TAKEN: No Further action needed

4. Retention Chamber Temperature/ setpoint

   STATUS: Complete. The actual temperature of the retention chamber was observed on the monitoring system as well as the setpoint setting. These readings are instantaneous readings, and do reflect the averages.
   NGI temperature setpoint 1508. Actual thermocouple temperature 1514.
   Burners temperature setpoint 1508. Actual thermocouple temperature 1507.
   ACTION TAKEN: No Further action needed

5. Calibration on Flow meter

   STATUS: Complete. The calibration on the flow transmitter was checked with both continuous purge active and without the purge turned on. The system was in calibration.
   ACTION TAKEN No Further action needed

6. Air flow traverse done and error %

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and inclined manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 11%, with the flow meter reading higher than the actual manual pitot tube velocities.
   ACTION TAKEN: No Further action needed

7. System Cycle times

   STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests.
   ACTION TAKEN: No Further action needed

8. Thermocouple reading / traceable measurement
   STATUS: Complete. The thermocouple readings were compared with the NIST traceable

readings and the readings were found to be less than 5 degrees difference. This is within the manufacturer's specifications.

ACTION TAKEN No Further action needed

9. Inlet Static pressure / Set point

STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The pressure and setpoint were equal at -2.5" w.c.

ACTION TAKEN: No Further action needed

Additional Pages followed in submittal to EPA concerning other facilities. NO info related to Hawthorne.

MAY 2000 MEETING

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 28 2000

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Mr. Paul J. Vasquez, Manager
Environmental Engineering - Wood Products
Georgia Pacific Corporation
133 Peachtree Street NE
P.O. Box 105605
Atlanta, Georgia 30348-5605

OCT -5 2000

Dear Mr. Vasquez:

EPA has reviewed the information in your May 19, 2000, letter to Laxmi Kesari providing an explanation to several questions that were posed in a meeting on March 8, 2000, concerning changes to the parametric monitoring plan for your Phase I facilities. You requested these changes as part of your annual report on the parametric monitoring system as provided for in the Consent Decree.

As discussed in a conference call on June 13, 2000, we approve of changing the airflow measurement for the RTO from ACFM to SCFM at the Skippers OSB facility. We also approve use of the maximum average airflow as demonstrated in the 3 1-hr tests as the measure for the maximum RTO outlet airflow but do not agree to your proposal to set the airflow parameter at an additional 10% to the maximum average tested airflow.

Relative to the residence chamber temperature parameter, you have stated that you will maintain the set point temperatures as established, but to compensate for the temperature differential due to thermocouple sensitivity as described in your letter, and the possibility from time to time that one or more 12-hour block average periods could be as much as 50°F below the set point, we approve of a minimum average temperature (as measured in the RTO chamber during the 12-hour period) of no more than 50°F below the set point. We accept this inasmuch as you have tested at these lower temperatures and demonstrated the DRE is achieved as required at the Phase I facilities with plans to continue these demonstrations at most of the Phase II facilities. You have indicated that compliance testing for the Phase II facilities is currently underway. Changes to temperature set points, minimum average temperatures or air flows listed below will be adopted subject to submittal of performance test results indicating compliance with operation at the given parameters.

According to the PMS plan descriptions approved by EPA for the Phase I facilities, the following were the approved compliance parameters initially*:

Facility	Min. RTO Operating Temperature (°F)	Set Temp. °F	Stack Gas Flow Rate (Max.Avg.) ACFM
Hawthorne, FL	1470	1500	68,894
Madison, GA	1575	1625	96,085
Skippers, VA	1500	1550	256,130

*both parameters to be expressed as a 12-hour block average calculated from the readings taken and recorded every 15 minutes.

The following are the reevaluated parameters based on the data provided and your proposed changes which were presented in your annual report delivered to us in February, 2000. As discussed above, we approve of the increased maximum average flow as demonstrated in your test during 1999 and the change of measurement of the flow for Skippers in terms of SCFM rather than ACFM.

Facility	Min. RTO Operating Temperature (°F)	Set Temp. °F	RTO Maximum Outlet Airflow ACFM (SCFM)
Hawthorne, FL Plywood	1500	1508	55,738
Madison, GA Plywood	1600	1625	111,136
Skippers, VA OSB	1500	1550	(218,159)

Relative to the Phase II facilities (all plywood), the following are the approved parameter values based on the plans submitted.

Facility	Min. RTO Operating Temperature (°F)	Set Temp. °F	RTO Maximum Outlet Airflow ACFM (SCFM)
Monticello, GA	1580	1600	116,286
Talladega, AL	~~1575~~ 1525 * PSY	1575	67,810
Peterman, AL	~~1500~~ 1480°F * PSY	~~1550~~ 1505 PSY * SEE ATTACHED E-MAIL FROM LINDA LAY.	64,485
Louisville, MS	1480	1505	55,794
Taylorsville, MS	1480	1500	89,383
Dudley, NC	1525	1575	83,195
Crossett, AR Plant 1	1500	1550	81,935
Plant 2	1525	1575	80,405
Fordyce, AR	1500	1550	66,671

As stated previously, reporting of deviations from the compliance parameters, i.e., below the minimum operating temperature and/or in excess of the stack gas flow rates (both expressed as the 12-hour block averages) should be included in the consent decree quarterly reports. These reports should provide both temperature and flow for all deviation periods. In addition, future summaries of Compliance Test results of VOC emissions should include the RTO chamber minimum operating temperature as recorded during the test as well as the stack gas flow rates and VOC concentrations.

If you have any questions, please contact Linda Lay of my staff on (202) 564-8577.

Sincerely,

Richard Biondi

Bruce C. Buckheit, Director
Air Enforcement Division

cc: Dianne Shawley, USDOJ

1/14/ PARAMETRIC MONITORING / CORRESPONDANCE WITH EPA

Vasquez, Paul J.

From: Lay.Linda@epamail.epa.gov
Sent: Monday, October 30, 2000 2:40 PM
To: Vasquez, Paul J.
Cc: "Home - skinfotek.erols.com, Laxmi_Kesari.yahoo.com"@epamail.epa.gov
Subject: RE: According to the PMS plan descriptions approved by EPA for th e Phase I facilities, the following were the approved compliance paramet er rs initially*:

Yes, I will make those changes. I understand these may change again pending the outcome of the testing conducted at Peterman. Please keep us posted on the results of the tests and, as stated before, please include the set temperature and RTO chamber minimum operating temperature as recorded during the test as well as the stack gas flow rates and VOC concentrations. Thanks.

PJVASQUE@gapac.com
10/24/2000 02:30 PM

To: Linda Lay/DC/USEPA/US@EPA
cc: Laxmi Kesari/DC/USEPA/US@EPA, Dianne.Shawley@usdoj.gov
Subject: RE: According to the PMS plan descriptions approved by EPA for th e Phase I facilities, the following were the approved compliance paramet er rs initially*:

Thanks. Also, Peterman's temperatures should be 1480F minimum and 1505F set point (although the plan states 1500F as the set point).

The deviations in airflow and temperature at Skippers and Hawthorne were not addressed in the September 28th letter. We discussed this issue and you stated that you would make reference in the document as to how to handle them. let me know what we should do to address these deviations a set the record straight. Thanks.

Paul J. Vasquez
Manager, Environmental Engineering
Wood Products
Georgia-Pacific Corporation
(404) 652-7327 FAX (404) 588-3975
e-mail PJVASQUE@GAPAC.COM

-----Original Message-----
From: Lay.Linda@epamail.epa.gov [mailto:Lay.Linda@epamail.epa.gov]
Sent: Tuesday, October 24, 2000 9:18 AM
To: Vasquez, Paul J.
Cc: Kesari.Laxmi@epamail.epa.gov; Vasquez, Paul J.; Dianne.Shawley@USDOJ.gov
Subject: RE: According to the PMS plan descriptions approved by EPA for th e Phase I facilities, the following were the approved compliance paramete rs initially*:

Yes, you are right. You specified 1525F as the minimum temperature in the Parametric Monitoring System May 1999 Report on Talladaga.

Linda Lay

PJVASQUE@gapac.com
10/23/2000 03:07 PM

To: PJVASQUE@gapac.com, Linda Lay/DC/USEPA/US@EPA
cc: Laxmi Kesari/DC/USEPA/US@EPA
Subject: RE: According to the PMS plan descriptions approved by EPA for th e Phase I facilities, the following were the approved compliance paramete rs initially*:

Linda, it was brought to my attention this morning that the minimum temperature for Talladegas' RTO should be 1525 and not 1575F as shown in the letter from Bruce Buckheit dated September 28, 2000. I hope that you would agree with this observation as I have instructed management at our Talladega Plywood facility to use 1525F as the minimum RTO temperature. Thanks.

Paul J. Vasquez
Manager, Environmental Engineering
Wood Products
Georgia-Pacific Corporation
(404) 652-7327 FAX (404) 588-3975
e-mail PJVASQUE@GAPAC.COM

-----Original Message-----
From: Vasquez, Paul J.

Sent: Friday, September 08, 2000 5:10 PM
To: 'Linda Lay'
Cc: 'Laxmi Kesari'
Subject: According to the PMS plan descriptions approved by EPA for the Phase I facilities, the following were the approved compliance parameters initially*:

JANUARY 2002 ANNUAL REPORT

Georgia-Pacific Corporation

133 Peachtree Street NE (30303)
P.O. Box 105605
Atlanta, Georgia 30348-5605
Telephone (404) 652-4000

January 23, 2002

Director
Air Enforcement Division
Office of Enforcement & Comp. Assurance
U. S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., N.W.
Washington, DC 20044

Chief
Environmental Enforcement Section
Environmental & National Resources Div.
U. S. Department of Justice
P. O. Box 7611
Ben Franklin Station
Washington, DC 20044

Mr. Laxmi Kesari
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., N.W.
Room 3117 C
Washington, DC 20460

CERTIFIED MAIL No. 1530 0001 7748 1864
RETURN RECEIPT REQUESTED

RE: Annual Report on the Calibration and Reevaluation of Parametric Monitoring Devices Pursuant to Consent Decree; United States of America Vs. Georgia-Pacific Corporation, US District Court, North Georgia District, Civil Action No. 1 96-CV-1818-FMH

Dear Sir/Madam:

The enclosed annual report is prepared in compliance with Section IV, paragraph 29 of the above referenced Consent Decree.

The annual report presents information related to the calibration and reevaluation of the parametric monitoring devices and review of the parameters at the Phase I and Phase II facilities. These include:

Should you have any questions regarding this progress report, please call me at (404) 652-7327.

Sincerely,

Paul J. Vasquez
Manager, Environmental Engineering
Wood Products

Enclosures
cc: Ronald L. Paul
Peter H. Smith
Bruce C. Buckheit, EPA

Annual Report
Calibration and Reevaluation
Of the
Parametric Monitoring Devices and
Compliance Control Parameters

Georgia-Pacific Corporation

January 20, 2002

Annual Report
Parametric Monitoring System
Georgia-Pacific Corporation

Summary

The Parametric Monitoring System (PMS) plans for the Phase I facilities were approved by EPA on April 5, 1999. Phase I facilities include:

- Skippers, Virginia OSB
- Madison, Georgia Plywood
- Hawthorne, Florida Plywood

This report includes information presented in the first calibration and reevaluation annual report for the Phase I facilities dated February 4, 2000. In addition, this report includes information about the calibration and reevaluation of the parametric monitoring devices and the review of the compliance parameters for the Phase I facilities. The periods covered are from May 19, 2000 (date of submittal of the supplemental information to the February 4, 2000 Annual Report) through October 5, 2000 (date of EPA's approval of the reevaluated compliance parameters), and from October 5, 2000 through October 5, 2001.

The Parametric Monitoring System (PMS) plans for the Phase II facilities were approved by EPA on October 5, 2000. Phase II facilities include:

Monticello, Georgia Plywood
Talladega, Alabama Plywood
Peterman, Alabama Plywood
Louisville, Mississippi Plywood
Taylorsville, Mississippi Plywood
Dudley, North Carolina Plywood
Crossett, Arkansas Plywood
Fordyce, Arkansas Plywood

This report includes information about the calibration and reevaluation of the parametric monitoring devices, and review of the compliance parameters for the Phase II facilities. The reporting period is from October 5, 2000 (date of EPA's approval of the new compliance parameters) through October 5, 2001.

G-P's approved plan consists of monitoring the compliance control parameters of RTO retention temperature and RTO outlet airflow every 15 minutes and averaged every 12 hours, as well as the operational indicators of static pressure at the inlet of the ID fan and position of the isolation dampers. The approved appropriate operating criteria for the respective compliance control parameters were based on engineering and compliance tests of VOC emissions from RTOs at the referenced facilities. The resulting VOC destruction efficiencies and corresponding compliance control parameter data from the compliance tests for each of the Phase I and Phase II facilities are summarized in Tables 1 and 2 of this report, respectively.

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Table 1. - Summary of VOC Destruction Efficiencies and Corresponding Compliance Control Parameters for the Phase I Facilities

Facility	RTO Retention Chamber Set Temperature, °F	RTO Outlet Airflow, ACFM (SCFM)	VOC Destruction Efficiency, %	Production Rate, PLY 3/8"-SF/Hr (OSB Ton OD/Hr)
Hawthorne, FL Plywood Engineering Test 5/6/97	1508	71,518	99.56	46,439
Hawthorne, FL Plywood Compliance test 7/2/97	1509	70,881	98.45	47,811
Hawthorne, FL Plywood Compliance test 6/11/99	1508	54,532	99.75	44,835
Hawthorne, FL Plywood Compliance test 5/15/01	1508	62,232	99.3	49,890
Madison, GA Engineering test Plywood 3/5-7/97	1500 F 1550 F 1600 F Burner 1600 F NGI	55,800* 61,400 69,400 69,400	96.9 97.6 98.9 98.3	Not taken for engineering study
Madison, GA Engineering test Plywood 5/1/97	1600	141,239	96.9	Not taken for engineering study
Madison, GA Plywood Compliance test 6/27/97	1625	96,085	95.8	54,842
Madison, GA Plywood Compliance test 6/10/99	1625	111,065	94.8	48,282
Madison, GA Plywood Compliance test 6/7/01	1625	112,671	98.3	50,955
Skippers, VA OSB Engineering Test 5/19/97	RTO #1 – 1496 RTO #2 – 1498	RTO#1 and RTO#2 4*52,000	RTO #1 – 94.7 RTO #2 – 94.6	NA

Skippers, VA OSB Compliance Test 9/18/97	1550	259,050	94.3	34.0 OD tons/hr
Skippers, VA OSB Compliance test 6/3/99	1550	298,369 (201,514)	92.5	33.5 OD tons/hr
Skippers, VA OSB Compliance test 12/15-17/99	1500 1550	309,015 (203,670) 331,544 (218,159)	97.8 96.9	36.3 OD tons/hr 31.4 OD tons/hr
Skippers, VA OSB Compliance test 11/28/01	1550	318,935 (215,500)	98.9	41.5 OD tons/hr

Table 2. - Summary of VOC Destruction Efficiencies and Corresponding Compliance Control Parameters for Phase II Facilities

Facility	RTO Retention Chamber Set Temperature, °F	RTO Outlet Airflow, ACFM (SCFM)	VOC Destruction Efficiency, %	Production Rate, PLY 3/8"-MSF/Hr (OSB Ton OD/Hr)
Crossett, AR #1 Compliance Test 11/9/98	1550	81,453	97.97	46.71
Crossett, AR #1 Compliance Test 11/6/00	1550	64,729	96.90	52.60
Crossett, AR #2 Compliance Test 11/10/98	1575	78,432	99.3	47.56
Crossett, AR #2 Compliance Test 11/7/00	1575	62,634	99.4	52.8
Crossett, AR #2 Compliance Test 3/15/01	1575	88,302	97.8	49.5
Dudley, NC Compliance Test 9/10/98	1575	79,793	97.3	58.1

Dudley, NC Compliance Test 10/12/00	1575	86,657	98.4	48.4
Fordyce, AR Compliance Test 12/29/98	1550	66,262	92.2	41.52
Fordyce, AR Compliance Test 11/14/00	1550	69,822	99.6	39.0
Louisville, MS Compliance Test 11/2/98	1500	54,893	97.33	39.07
Louisville, MS Compliance Test 10/30/00	1505	67,969	100	37.37
Monticello, GA Compliance Test 7/16/98	1600	111,974	97.0	47.74
Monticello, GA Compliance Test 7/20/00	1600	96,989	96.6	45.55
Peterman, AL Compliance Test 10/15/98	1505	63,728	97.12	47.02
Peterman, AL Compliance Test 10/4/00	1505	68,411	96.7	41.75
Talladega, AL Compliance Test 8/25/98	1575	62,644	97.3	40.74
Talladega, AL Compliance Test 7/18/00	1575	62,369	93	42.8
Taylorsville, MS Compliance Test 1/8/99	1500	87,723	99.2	45.19
Taylorsville, MS Compliance Test 11/9/00	1505	82,682	99.5	43.64

The temperatures presented in Tables 1 and 2 represent the retention chamber setpoint temperature in the RTO. The RTO outlet airflows represent the highest single run during each engineering and/or compliance test.

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EPA Approval of Compliance Parameters for Phase I and Phase II Facilities

In the October 5, 2000 EPA approval letter, the following were approved for all Phase I and Phase II facilities:

- Changed the airflow measurement for the RTO from ACFM to SCFM at the Skippers, Virginia OSB facility.
- Use of the maximum airflow for a single run as demonstrated in the 3 – 1-hour tests as the measure for the maximum RTO outlet airflow.
- Maintain RTO set point temperature as established during compliance tests.
- A minimum RTO operating temperature which is equivalent to about 50°F below the set point temperature and provided that a 90% DRE is demonstrated at these temperatures for Phase I facilities and for most of the Phase II facilities.

Table 3 summarizes the reevaluated and EPA approved minimum RTO operating and set point temperatures, and RTO maximum outlet airflow for all Phase I and Phase II facilities.

Table 3. - Summary of the Reevaluated and Approved Parameters for the Phase I and Phase II Facilities (per EPA's letter dated October 5, 2000)

Facility	Phase	Minimum RTO Operating Temperature (°F)	Set Temperature (°F)	RTO Maximum Outlet Airflow ACFM (SCFM)
Hawthorne, FL	I	1500	1508	55,738
Madison, GA	I	1600	1625	111,136
Skippers, VA	I	1500	1550	(218,159)
Monticello, GA	II	1580	1600	116,286
Talladega, AL	II	1525	1575	67,810
Peterman, AL	II	1480	1505	64,485
Louisville, MS	II	1480	1505	55,794
Taylorsville, MS	II	1480	1500	89,383
Dudley, NC	II	1525	1575	83,195
Crossett, AR	II	1500	1550	81,935
Crossett, AR	II	1525	1575	80,405
Fordyce, AR	II	1500	1550	66,672

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Reevaluation and Calibration of Parametric Monitoring Devices and Review of the Parameters.

Reevaluation and calibration of the monitoring devices were also conducted, and adjustments made to insure their proper operation and reliability. The results are documented in **Attachment A** of this report which includes the assessments required in the PMS plan and conducted for each of the Phase I and Phase II facilities over the reporting periods stated above.

A review of the compliance parameters indicates that none of the RTO combustion temperature set point required any changes. RTO maximum airflows were revised based on the results of the most recent compliance test for each of the Phase I and Phase II facilities. No additional changes to the compliance control parameters and operational indicators are required as of the date of this report.

Compliance parameters were reviewed and reevaluated based on the most recent compliance test results. **Table 4** below is a summary of the revised compliance control parameters based on the most recent compliance tests conducted at each of the Phase I and II facilities between the years 2000 and 2001. The RTO set point temperatures summarized in **Table 4** are consistent with the values approved by EPA in letter dated October 5, 2000, and also shown in **Table 3** above. The RTO maximum outlet airflow was determined during the most recent compliance test and therefore, we have adopted these values as the new parameter limits to demonstrate compliance.

Table 4. - Summary of the Revised Compliance Control Parameters for the Phase I and Phase II Facilities Based on Compliance Tests Performed in 2000-2001.

Facility	Phase	Minimum RTO Operating Temperature (°F)	Set Temperature (°F)	RTO Maximum Outlet Airflow ACFM (SCFM)
Hawthorne, FL Plywood Compliance test 5/15/01	I	1500	1508	62,232
Madison, GA Plywood Compliance test 6/7/01	I	1600	1625	112,671
Skippers, VA OSB Compliance test 11/28/01	I	1500	1550	318,935 (215,500)
Monticello, GA Compliance Test 7/20/00	II	1580	1600	96,989
Talladega, AL Compliance Test 7/18/00	II	1525	1575	62,369
Peterman, AL	II	1480	1505	68,411

Compliance Test 10/4/00				
Louisville, MS Compliance Test 10/30/00	II	1480	1505	67,969
Taylorsville, MS Compliance Test 11/9/00	II	1480	1505	82,682
Dudley, NC Compliance Test 10/12/00	II	1525	1575	86,657
Crossett, AR #1 Compliance Test 11/6/00	II	1500	1550	64,729
Crossett, AR #2 Compliance Test 3/15/01	II	1525	1575	88,302
Fordyce, AR Compliance Test 11/14/00	II	1500	1550	69,822

Hawthorne, Florida Plywood

- The 5/6/97 engineering test was conducted by Air Consulting and Engineering, Inc. to verify and confirm the RTO retention chamber temperature settings recommended by the RTO manufacturer to demonstrate compliance with the required 90% VOC destruction efficiency.
- The RTO retention chamber temperature set point of 1508 °F has been maintained since the engineering test of 5/6/97. There has been some instances when the RTO retention chamber temperature has gone above the set point temperature while operating on burners and/or in the fuel enhancement mode (i.e., natural gas is injected in the inlet of the RTO to increase the BTU content of the gases from the dryers). This increase in temperature appears to be directly related to the introduction of gases with high concentration of VOC and the RTO's slow cool down response time. Since the appropriate operating criteria for RTO retention chamber temperature is based on a minimum temperature, limited excursions above the set point do not represent compliance issues.
- The 7/2/97 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1509 °F. Although, SEC had recommended a set point of 1500 °F, G-P decided to set the temperature at 1509 °F. Maximum airflow was set at 70,881 ACFM.
- On 1/16/98, the required Parametric Monitoring System Study report was submitted to EPA for approval.
- Since developing PMS and installing its component January of 1998, the compliance control parameters and monitoring devices for the Hawthorne facility have performed well.
- From time to time, the RTO system will experience systematic problems that either cause an alarm and/or automatically puts the RTO in a shutdown mode.
- During the first months of trial and experimentation with the PMS, we experienced some problems with moisture trapped in the airflow meter sensing lines thus interfering with the

meter's ability to measure airflow. The problem was corrected by installing an air dryer and a purging system. The purging system was later automated in April of 1999.

- The 6/11/99 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1509 °F. A maximum airflow was set at 54,532 ACFM. There have been some instances when the RTO retention chamber temperature has gone above the set point temperature. This increase in temperature, which occurred during the compliance test, appears to be directly related to the introduction of gases with high concentration of VOC and the RTO's slow cool-down response time. The average temperature reached 1538 °F with the RTO control temperature set at 1508 °F. As a result, the VOC destruction efficiency was 99.75%. This confirms that temperature above the set point is not a compliance issue.
- The 5/15/01 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1508 °F. A maximum airflow was set at 62,232 ACFM. The airflow RATA results showed a 5.99% relative accuracy.

Madison, Georgia Plywood

- The 3/5/97-engineering test was conducted by Air Techniques, Inc. at the request of the RTO manufacturer to determine the VOC destruction efficiencies at various RTO retention chamber temperature settings.
- The 5/2/97 engineering test was conducted by Trigon Engineering, Inc. to verify and confirm the RTO retention chamber temperature settings recommended by the RTO manufacturer to demonstrate compliance with the required 90% VOC destruction efficiency.
- The RTO retention chamber temperature set point of 1,625 °F has been maintained since the engineering test of 5/2/97. There have been some instances when the RTO retention chamber temperature has gone above the set point temperature while operating. This increase in temperature appears to be directly related to the introduction of gases with high concentration of VOC and the RTO's slow response to cool.
- The 6/27/97 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1625 °F. Although, DURR Environmental had recommended a set point of 1550 °F, G-P decided to set the temperature at 1625 °F. Maximum airflow was set at 96,085 ACFM.
- On 1/16/98, the required Parametric Monitoring System Study report was submitted to EPA for approval.
- Since developing the PMS and installing its components in September of 1998, the compliance control parameters and monitoring devices for the Madison facility have performed well.
- From time to time, the RTO system will experience systematic problems that either cause an alarm and/or automatically puts the RTO in a shutdown mode.
- During the first months of trial and experimentation with the PMS, we experienced some problems with moisture trapped in the airflow meter sensing lines thus interfering with the meter's ability to measure airflow. The problem was corrected by installing an air dryer and a purging system. The purging system was later automated in March of 1999.
- The 6/10/99 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1625 °F. A maximum airflow was set at 111,065 ACFM.

- The 6/7/01 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1625 °F. A maximum airflow was set at 112,671 ACFM. The airflow RATA results showed a 0.5% relative accuracy.

Skippers, Virginia OSB

- The 5/19/97 engineering test was conducted by Smith Environmental Corporation to determine the minimum set point temperature to operate the RTOs. The results indicate that at 1496 °F in #1 RTO and 1498 °F in RTO#2, VOC destruction efficiencies above 90% can be achieved.
- The 7/23/97 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1550 °F. Although, SEC had recommended a set point of 1500 °F, G-P decided to set the temperature at 1550 °F to allow a +/- 50 °F fluctuation to compensate for temperature differential due to thermocouple sensitivity and also due to RTO low response to cooling and heating periods. Maximum airflow for both RTOs was set at 259,050 ACFM.
- Since developing the PMS and installing its components in January of 1998, the compliance control parameters and monitoring devices, for most parts, have performed well.
- On 1/16/98, the required Parametric Monitoring System Study report was submitted to EPA for approval.
- After a few months of operation of the Parametric Monitoring System, we found that moisture was impacting the performance of the Brandt airflow meter causing us to purge the sensing lines more often than what the manufacturer had recommended. As this activity became time consuming, the manufacturer recommended automating the purging cycle, which corrected the problem with moisture interfering with the airflow meter. Automation was completed in April 1999. Because of moisture interference, there were instances when airflows were erratic showing too low or too high airflows.
- On 3/15/99, at the request of Georgia-Pacific Corporation, SEC initiated a process to optimize the reliability of the RTO system, reduce the frequency of washouts, and correct potential safety problems. The evaluation process continued until the 6/3/99-compliance test was conducted. The changes resulted in improved VOC destruction efficiencies while the thermal efficiency decreased. The sporadic loss of heat associated with the on-line bake-out and cycle timing adjustment caused the RTO stack temperatures to fluctuate more than 80 F. This fluctuation resulted in large enough gas density variations to impact the accuracy of airflow measurement by the airflow meter. We corrected this situation by integrating gas temperature measurement into the meter's calculation equation. This was accomplished by placing new temperature compensated flow meters in the RTO stacks. As the RTO media has continued to age, however, RTO outlet temperatures have continued to rise. Consequently, the airflow when measured in ACFM at those higher temperatures has, on a few occasions, exceeded the maximum 12-hour average of 302,851 ACFM, which was established at an average stack temperature of 320 °F. In order to make a valid comparison of the actual airflows to the maximum 12-hour average, this temperature differential needs to be taken into account and the airflows need to be adjusted to a common temperature basis. To properly standardize the airflows and minimize the impact of outlet temperature variation, we are measuring airflow as wet standard cubic feet per minute (SCFM, wet). The new Brandt meter installed in September of 1999 has the built-in capability to do this without additional modification. The maximum 12-hour average airflow will also be converted to an equivalent SCFM (wet basis). These and other changes will be incorporated in the Skippers OSB Parametric Monitoring System plan.

There were five 12-hour average periods in October and November that show an exceedance of the SCFM but well within the 10% over the maximum average airflow.

- The 6/3/99 test was the first biennial compliance test required by the Consent Decree to demonstrate compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1550 °F. Based on the compliance test results, a new maximum average airflow of 298,369 ACFM combined for both RTOs was determined and set as the new 12-hour average airflow. The new airflows were validated during the compliance test period.
- The 12/15-17/99 compliance tests report demonstrates that VOC destruction efficiencies can be achieved at RTO set point temperatures of 1500 °F and 1550 °F. This determination supports our original position to use +/- 50 °F fluctuation to compensate for temperature differential due to thermocouple sensitivity and also due to RTO low response to cooling and heating periods. However, G-P is committed to continue operating the RTOs at a set point of 1550 °F instead of 1500 °F. Airflow RATA test was also conducted during the 12/15-17/99 compliance test. A maximum total airflow was determined at 331,544 ACFM or 218,159 SCFM at the 1550 °F set point. The new airflows were validated during the compliance test period.
- The 11/28/01 compliance tests report demonstrates that VOC destruction efficiencies can be achieved at the RTO set point temperature of 1550 °F. Airflow RATA test was also conducted during the 11/28/01 compliance test and results show an average of 4.1% relative accuracy. A maximum total airflow was determined at 318,935 ACFM or (215,500) SCFM at the 1550 °F set point.

Monticello, Georgia Plywood

- The 7/20/00 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1600 °F. A maximum airflow was set at 96, 989 ACFM. The airflow RATA results showed a 2.0% relative accuracy.

Talladega, Alabama Plywood

- The 7/18/00 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1575 °F. A maximum airflow was set at 62,369 ACFM. The airflow RATA results showed a 8.7% relative accuracy.

Peterman, Alabama Plywood

- The 10/4/00 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1505 °F. A maximum airflow was set at 68,411 ACFM. The airflow RATA results showed a 3.7% relative accuracy.

Louisville, Mississippi Plywood

- The 10/30/00 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1505 °F. A maximum airflow was set at 67,969 ACFM The airflow RATA results showed a 4.54% relative accuracy.

Taylorsville, Mississippi Plywood

- The 11/9/00 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1505 °F. A maximum airflow was set at 82,682 ACFM. The airflow RATA results showed a 3.31% relative accuracy.

Dudley, North Carolina Plywood

- The 10/12/00 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1575 °F. A maximum airflow was set at 86,657 ACFM. The airflow RATA results showed a 2.1% relative accuracy.

Crossett #1, Arkansas Plywood

- The 11/6/00 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1550 °F. A maximum airflow was set at 64,729 ACFM. The airflow RATA results showed a 8.4% relative accuracy.

Crossett #2, Arkansas Plywood

- The 3/15/01 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1575 °F. A maximum airflow was set at 88,302 ACFM. The airflow RATA results showed a 5.41% relative accuracy.

Fordyce, Arkansas Plywood

- The 11/14/00 compliance test demonstrates compliance with the required 90% VOC destruction efficiency at a RTO retention chamber temperature of 1550 °F. A maximum airflow was set at 69,822 ACFM. The airflow RATA results showed a 3.44% relative accuracy.

Attachment A

(RTO Parametric Monitoring Assessment for Phase I Facilities from May 19, 2000 through October 5, 2001 and for Phase II Facilities from October 5, 2000 through October 5, 2001)

Pages have been removed from the original submittal to EPA that were reporting on facilities other than Hawthorne.

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne, Fl. **DATE 12/1 and 12/2/99**

1. Parametric Monitoring reports accurate

   STATUS: Complete. Reports were reviewed for completeness and accuracy.

   ACTION TAKEN: No Further action needed

2. Maintenance tasks performed on time

   STATUS: Complete. Reports were reviewed and dates verified.

   ACTION TAKEN: No Further action needed

3. Malfunction log kept for RTO

   STATUS: Complete. The log book was reviewed to determine that the malfunctions were documented as well as the corrective actions taken for the malfunctions.

   ACTION TAKEN: No Further action needed

4. Retention Chamber Temperature/ setpoint

   STATUS: Complete. The actual temperature of the retention chamber was observed on the monitoring system as well as the setpoint setting. These readings are instantaneous readings, and do reflect the averages.

   NGI temperature setpoint 1508. Actual thermocouple temperature 1514.

   Burners temperature setpoint 1508. Actual thermocouple temperature 1507.

   ACTION TAKEN: No Further action needed

5. Calibration on Flow meter

   STATUS: Complete. The calibration on the flow transmitter was checked with both continous purge active and without the purge turned on. The system was in calibration.

   ACTION TAKEN No Further action needed

6. Air flow traverse done and error %

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and inclined manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 11%, with the flow meter reading higher than the actual manual pitot tube velocities.

   ACTION TAKEN: No Further action needed

7. System Cycle times

   STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests.

   ACTION TAKEN: No Further action needed

8. Thermocouple reading / traceable measurement

   STATUS: Complete. The thermocouple readings were compared with the NIST traceable readings and the readings were found to be less than 5 degrees difference. This is within the manufacturers specifications.

   ACTION TAKEN No Further action needed

9. Inlet Static pressure / Set point

   STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The pressure and setpoint were equal at –2.5" w.c.

   ACTION TAKEN: No Further action needed

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne, Fl. **DATE 2/7, 2/8 and 2/9/00**

1. Parametric Monitoring reports accurate

   STATUS: Complete. Reports were reviewed for completeness and accuracy.

   ACTION TAKEN: Fan Static transmitter readings looked erroneous. Investigation showed that the sensing line was plugged with water. The line was removed and drained of water. No Further action needed.

2. Maintenance tasks performed on time

   STATUS: Complete. Reports were reviewed and dates verified.

   ACTION TAKEN: No Further action needed

3. Malfunction log kept for RTO

   STATUS: Complete. The log book was reviewed to determine that the malfunctions were documented as well as the corrective actions taken for the malfunctions.

   ACTION TAKEN: No Further action needed

4. Retention Chamber Temperature/ setpoint

   STATUS: Complete. The actual temperature of the retention chamber was observed on the monitoring system as well as the setpoint setting. These readings are instantaneous readings, and do reflect the averages.

   NGI temperature setpoint 1508. Actual thermocouple temperature 1510.

   ACTION TAKEN: No Further action needed.

5. Calibration on Flow meter

   STATUS: Complete. The calibration on the flow transmitter was checked with both continous purge active and without the purge turned on. The system was in calibrated on this visit..

   ACTION TAKEN No Further action needed

6. Air flow traverse done and error %

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and inclined manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 3% average error, with the flow meter reading slightly lower than the actual manual pitot tube velocities.

   ACTION TAKEN: No Further action needed

7. System Cycle times

   STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle times are 60 seconds

   ACTION TAKEN: No Further action needed

8. Thermocouple reading / traceable measurement

   STATUS: Complete. The thermocouple readings were compared with the NIST traceable readings and the readings were found to be less than 10 degrees difference on the average of the 3 thermocouples. This is within the manufacturers specifications.

   ACTION TAKEN No Further action needed

9. Inlet Static pressure / Set point

   STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.51" and the setpoint was –2.5"w.c.

   ACTION TAKEN: No Further action needed

RTO Parametric Monitoring Assessment Check Sheet

FACILITY: Hawthorne, Fl. **DATE: 5/30, and 5/31, and 6/1/00**

1. **Parametric Monitoring reports**

   STATUS: Complete. The plant is now correlating the parametric reports, alarm summaries, and check-sheets in a single notebook by day to facilitate the review of the records.

   ACTION TAKEN: The reports have been reviewed and found to be complete and accurate. No further action needed.

2. **Maintenance tasks**

   STATUS: Records reviewed for completeness and on time completion. The required tasks are on the work orders and are being done.

   ACTION NEEDED: Additional effort is needed to complete the tasks the same time each week on the weekly check-sheets. Currently there are some check sheets done anywhere from 3 to 11 days apart. The weekly check-sheets are meant to be done 7 days apart. This can vary 2 days either way. 5 to 9 days from last check.

3. **Malfunction log kept for RTO**

   STATUS: Complete.

   ACTION TAKEN: The facility is utilizing a malfunction log. No further action needed.

4. **Retention Chamber Temperature/ setpoint**

   STATUS: Complete. These readings are instantaneous readings, and do reflect the averages.

   NGI

   Unit 1 Temperature setpoint 1508. Actual thermocouple temperature 1552.

   ACTION TAKEN: No Further action needed.

5. **Calibration on Flow meter**

   STATUS: Complete. The flow meter calibration was checked and found to be slightly out of calibration. The system was reading slightly higher than actual flows.

   ACTION TAKEN No Further action needed

6. **Air flow traverse done and error %**

STATUS: Complete. Air flow traverse readings were done using a pitot tube and inclined manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 1.4% average error, with the flow meter reading slightly lower than the actual manual pitot tube velocities.

7. ACTION TAKEN: No Further action needed

8. **System Cycle times**

STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

ACTION TAKEN: No Further action needed

9. **Thermocouple reading / traceable measurement**

STATUS: Complete. The readings are within allowable scale error percentages.

#1 actual 1498, system reading 1504

#2 actual 1483, system reading 1487

#3 actual 1501, system reading 1516

#4 actual 1520, system reading 1532

ACTION TAKEN: No Further action needed

10. **Inlet Static pressure / Set point**

STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.46" and the setpoint was –2.5"w.c.

ACTION TAKEN: No Further action needed

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne, Fl. **DATE 8/21 to 8/23/00**

1. **Parametric Monitoring reports accurate**

   STATUS: Complete. For the most part the reports appear to be complete and accurate. The readings that have been out of range due to malfunctions have been recalculated to reflect the correct averages.

   ACTION TAKEN: I found an incident that was properly documented and reported to the State, but had not been listed in the Abort Database. This incident was listed. Also, there have some instances of elevated airflow due to moisture in the sensing tube for the inlet static controller. A drip leg was fabricated and will be installed during the Labor Day shutdown.

2. **Maintenance tasks performed on time**

   STATUS: Complete. The maintenance tasks are being performed as required at the proper frequency.

   ACTION TAKEN: no further action needed.

3. **Malfunction log kept for RTO**

   STATUS: Complete. The plant does a good job of documenting the malfunctions and other issues with the RTO in the logbook.

   ACTION TAKEN: No further action needed.

4. **Retention Chamber Temperature/ setpoint**

   STATUS: Complete. These readings are instantaneous readings, and do reflect the averages.

   NGI

   Unit 1 Temperature setpoint 1508. Actual thermocouple temperature 1510.

   ACTION TAKEN: No Further action needed.

5. **Calibration on Flow meter**

   STATUS: Complete. The system was calibrated on this visit. The unit was actually reading slightly lower than the "0" setting of 4ma.

   ACTION TAKEN No Further action needed

6. **Air flow traverse done and error %**

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and inclined manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 4.2% average error, with the flow meter reading slightly lower than the actual manual pitot tube velocities.

   ACTION TAKEN: No Further action needed

7. **System Cycle times**

   STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

   ACTION TAKEN: No Further action needed

8. **Thermocouple reading / traceable measurement**

   STATUS: Complete. The thermocouples were replaced during the July 4th shutdown as part of the annual maintenance requirements.

   ACTION TAKEN: No further action needed.

9. **Inlet Static pressure / Set point**

   STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.5" and the setpoint was –2.5"w.c.

   ACTION TAKEN: No Further action needed

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne Fl. **DATE 2/5, 2/6, and 2/7/01**

1. **Parametric Monitoring reports accurate**

   STATUS: Complete. The reports were checked and appear to be complete and accurate.

   ACTION TAKEN: No further action needed.

2. **Abort conditions tracked for compliance with conditions of Parametric Plan**

   STATUS: Complete. I did not locate any abort conditions that were not tracked and properly reported as required by the permit conditions or the Parametric Plan requirements.

   ACTION TAKEN: No further action needed.

3. **Maintenance tasks performed on time**

   STATUS: Complete. The maintenance tasks are properly identified and completed within the required frequency.

   ACTION TAKEN: No further action needed.

4. **Malfunction log kept for RTO**

   STATUS: Complete. There is a malfunction log kept in the control room and appears to be utilized for all malfunction conditions.

   ACTION TAKEN: No further action needed.

5. **Retention Chamber Temperature/ setpoint**

   STATUS: Complete. These readings are instantaneous readings, and do reflect the averages. The setpoint is 1508 and the temperature average when I viewed it was 1510.

   ACTION TAKEN: No Further action needed.

6. **Calibration on Flow meter**

   STATUS: Complete. The flow meter was found to be in calibration.

   ACTION TAKEN No Further action needed

7. **Air flow traverse done and error %**

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and digital manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was 1-% average error, with the flow meter reading slightly higher than the actual pitot tube velocities.

   ACTION TAKEN: No Further action needed

8. **System Cycle times**

   STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

   ACTION TAKEN: No Further action needed

9. **Thermocouple reading / traceable measurement**

   STATUS: Complete. The readings were within 1% of the actual readings, with the thermocouples reading slightly higher than actual readings.

   ACTION TAKEN: No further action needed at this time.

10. **Inlet Static pressure / Set point**

    STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.45" and the setpoint was –2.5"w.c.

    ACTION TAKEN: No Further action needed

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne Fl. **DATE 6/12, 6/13, and 6/14/01**

1. **Parametric Monitoring reports accurate**

   STATUS: Complete. The reports were checked and appear to be complete and accurate.

   ACTION TAKEN: No further action needed.

2. **Abort conditions tracked for compliance with conditions of Parametric Plan**

   STATUS: Complete. I did not locate any abort conditions that were not tracked and properly reported as required by the permit conditions or the Parametric Plan requirements.

   ACTION TAKEN: No further action needed.

3. **Maintenance tasks performed on time**

   STATUS: Complete. The maintenance tasks are properly identified and completed within the required frequency.

   ACTION TAKEN: No further action needed.

4. **Malfunction log kept for RTO**

   STATUS: Complete. There is a malfunction log kept in the control room and appears to be utilized for all malfunction conditions.

   ACTION TAKEN: No further action needed.

5. **Retention Chamber Temperature/ setpoint**

   STATUS: Complete. These readings are instantaneous readings, and do reflect the averages. The setpoint is 1508 and the temperature average when I viewed it was 1512. At this time, there was a dryer down for maintenance and the system was on burners.

   ACTION TAKEN: No Further action needed.

6. **Calibration on Flow meter**

   STATUS: Complete. The flow meter was found to be in calibration.

   ACTION TAKEN No Further action needed

7. **Air flow traverse done and error %**

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and digital manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was less than 1-% average error, with the flow meter reading slightly higher than the actual pitot tube velocities.

   ACTION TAKEN: No Further action needed

8. **System Cycle times**

   STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

   ACTION TAKEN: No Further action needed

9. **Thermocouple reading / traceable measurement**

   STATUS: Complete. The readings were less than 1% error from the actual readings.

   ACTION TAKEN: No further action needed at this time.

10. **Inlet Static pressure / Set point**

    STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.56" and the setpoint was –2.5"w.c.

    ACTION TAKEN: No Further action needed

Additional Items:

In review of the records it was determined that the recent compliance test did not include the FLOW RATA as required by the Parametric Plan, Section VII, condition 3, that states the RATA will be done in conjunction with the biennial compliance testing requirements. This was brought to the attention of the 114 Consent Decree manager and he is getting a ruling from the EPA as to the exact remedy.

RTO Parametric Monitoring Assessment Check Sheet

FACILITY Hawthorne Fl. **DATE 10/2, 10/3/2001**

1. **Parametric Monitoring reports accurate**

   STATUS: Complete. The reports were checked and appear to be complete and accurate.

   ACTION TAKEN: No further action needed.

2. **Abort conditions tracked for compliance with conditions of Parametric Plan**

   STATUS: Complete. I did not locate any abort conditions that were not tracked and properly reported as required by the permit conditions or the Parametric Plan requirements.

   ACTION TAKEN: No further action needed.

3. **Maintenance tasks performed on time**

   STATUS: Complete. The maintenance tasks are properly identified and completed within the required frequency.

   ACTION TAKEN: No further action needed.

4. **Malfunction log kept for RTO**

   STATUS: Complete. There is a malfunction log kept in the control room.

   FOLLOW-UP ACTION NEEDED: Ensure that all RTO malfunction conditions are documented in the logbook.

5. **Retention Chamber Temperature/ setpoint**

   STATUS: Complete. These readings are instantaneous readings, and do reflect the averages. The setpoint is 1508 and the temperature average when I viewed it was 1498.

   ACTION TAKEN: No Further action needed.

6. **Calibration on Flow meter**

   STATUS: Complete. The flow meter was found to be in calibration.

   ACTION TAKEN No Further action needed

7. **Air flow traverse done and error %**

   STATUS: Complete. Air flow traverse readings were done using a pitot tube and digital manometer to record the velocities. The resulting readings were entered into a computer program to calculate the ACFM of the RTO. The error percentage was less than 1% average error, with the flow meter reading slightly higher than the actual pitot tube velocities. The computer reading was 45,346 ACFM and the pitot velocities were 45,292 ACFM.

   ACTION TAKEN: No Further action needed

8. **System Cycle times**

   STATUS: Complete. The actual cycle times of the RTO was observed with the cycle times being equal to the cycle times during the compliance tests. The cycle time is 60 seconds.

   ACTION TAKEN: No Further action needed

9. **Thermocouple reading / traceable measurement**

   STATUS: Complete. The readings were less than 1% error from the actual readings.

   ACTION TAKEN: No further action needed at this time.

10. **Inlet Static pressure / Set point**

    STATUS: Complete. The inlet static pressure setpoint was compared with the actual readings. The actual pressure reading at the time I read it was –2.48" and the setpoint was –2.5"w.c.

    ACTION TAKEN: No Further action needed

FDEP REQUEST FOR ADDITIONAL INFORMATION JANUARY 2004

Department of Environmental Protection

Jeb Bush
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

David B. Struhs
Secretary

January 09, 2004

Mr. Martin Shorey, Plant Manager
Georgia-Pacific Corporation, Hawthorne Plywood Plant
223 Gordon Chapel Road
Hawthorne, FL 32640

Dear Mr. Shorey:

Putnam County – Air Permitting
Georgia-Pacific Corporation, Hawthorne Plywood Plant
AIRS ID Number 1070015; Project Number 004
Request For Additional Information

In July 1996, the Environmental Protection Agency, (EPA), and Georgia Pacific Corporation (GP) entered into a "Consent Decree". Paragraph 18, on page 12 of the said "Decree" requires that the RTO-based control technology be compliance demonstration tested at least biennial (as corrected), to demonstrate compliance with the required destruction efficiency. A request to modify this requirement would have to be approved by the EPA.

Paragraph 26, page 16, of the said "Decree", required that two or more operational parameters be used for continuous parametric monitoring. In support of the proposed CAM plan please provide the data, (reports submitted to EPA), required by the "Consent Decree". It appears that a RATA has been performed for "flow", please provide data from a RATA performed for "temperature". Some of the submitted test reports do not provide production rate and retention temperature. Please submit this data.

Page 16, of the recent application states a maximum process rate of 56 MSF/HR and Table 3 of the 2003 stack test report supports this. The current submittal includes consideration of a modified Air Construction Permit. This modification will address a process rate limit, and requirements of the "Consent Decree".

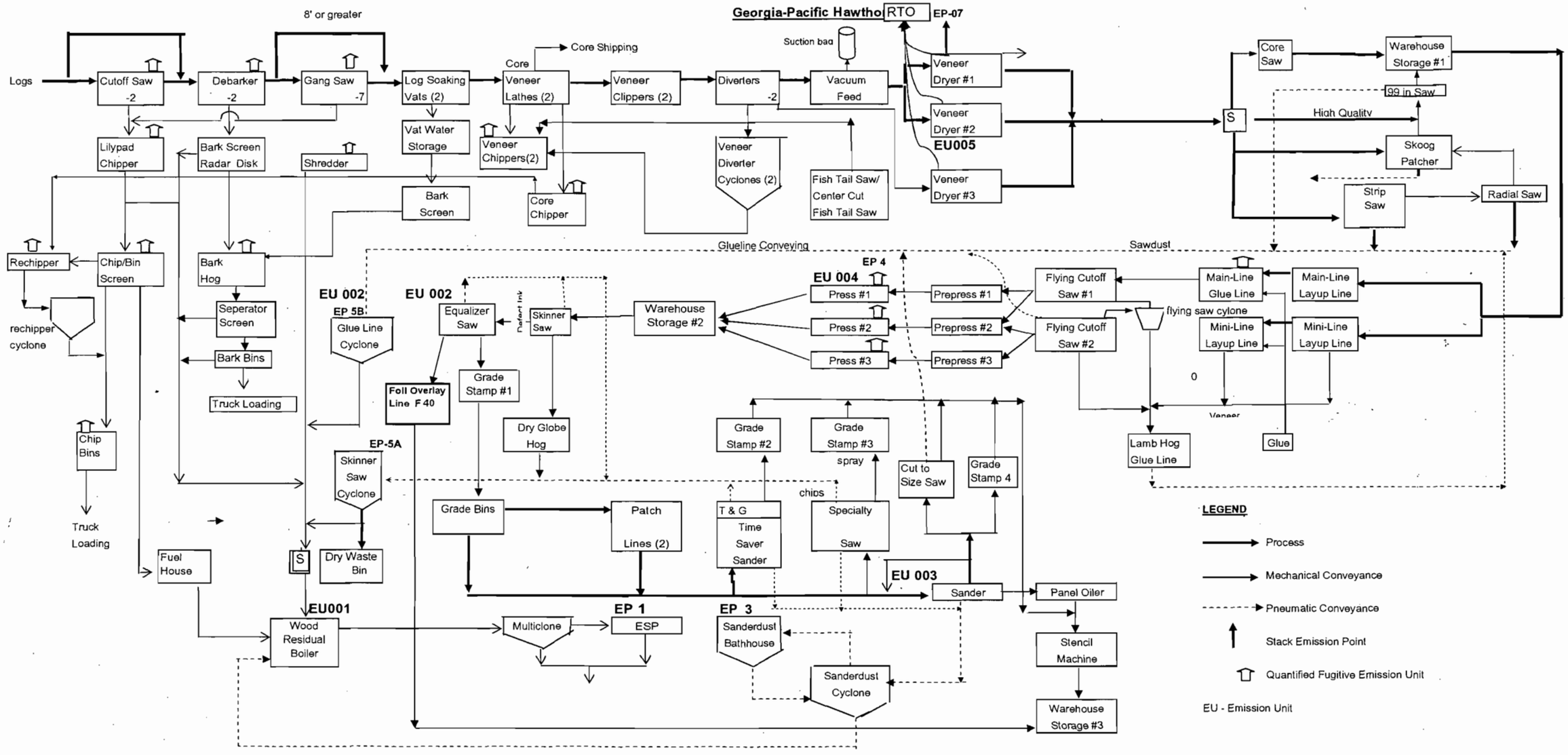
If you should have any questions, please call Chris Kirts at (904) 807-3235.

Sincerely,

Christopher L. Kirts, P.E.
District Air Program Administrator

CLK:ck

cc:
Margarete M. Vest, P.E.
Jonathan Holtom, P.E., DEP - DARM
Wendell Reed, EPA Region 4



mmvtst-5/3/2004,PFD1-17-03

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30308

MAR 27 1980

REF: 4AF-AH

Post-it® Fax Note 7671	Date 10/7	# of pages ▶
To Mr. Holtom	From Hui Liang	
Co./Dept. TV	Co. NED	
Phone # 291-9531	Phone # 804 3238	
Fax # 291-9533	Fax # (904) 448 4363	

Mr. Gerald Tice
Georgia Pacific Corporation
P. O. Box 1808
Augusta, Georgia 30903

Re: PSD-FL-038
Hawthorne, Florida
Plywood Plant

Dear Mr. Tice:

We have received your letter of February 29, 1980 pointing out the differences between the allowable emission limits received in your State permits (AC54-23130 and AC54-23131) and those proposed in your Federal application. It is apparent that significant differences exist and that the conditions for exemption from Federal Prevention of Significant Deterioration (PSD) regulations (EPA letter of February 19, 1980) are not met at this time.

The differences are identified in the attached table of emitting facilities. The boiler has a slightly larger allowable emission rate. More importantly, seven materials handling sources have no State allowable emission rate. According to your application, each of these seven unpermitted sources is controlled with a cyclone collector. In addition, source number 7 is controlled with a bag filter in series with the cyclone. Total yearly allowable emissions from these sources is calculated to be 37.2 tons per year. Potential emissions as defined in the existing PSD Regulation (40 CFR 52.21, June 19, 1978) will be somewhat higher depending on the efficiency of the various controls.

You have two options to pursue to obtain complete Authority to Construct. First, EPA can continue to process your Federal application. Alternatively, you could obtain a revised State permit which contains allowable emissions limits for the seven sources not currently permitted. It is not essential that State limits exactly equal those proposed in the Federal applications. However, it is essential that the State allowable emissions limits assure that the potential to emit as defined in the proposed revisions to the PSD Regulation (40 CFR 52.21, proposed September 5, 1979) from the source is less than 250 tons per year. Further, increment consumption by these facilities will be set by their permitted allowable rate.

If you wish EPA to continue processing your PSD application, please contact Mr. Kent Williams of my staff immediately. In this way, delay in processing your application can be avoided.

Sincerely,

Tommie A. Gibbs

Tommie A. Gibbs, Chief
Air Facilities Branch

TAG:JLS;jt

Attachment

EMITTING FACILITIES

Number (Figure 1)	Facility	State Permit TSP Allowable lb/hr	Proposed TSP Allowable PSD-FL-038 lb/hr	Difference
1	Trim Conveying	11.7	11.7	No
2	Boiler	33.6	27.2	Yes
3A	Chip Conveying	None	(3)*	Yes
3B	Chip Conveying	None	(3)*	Yes
3C	Chip Conveying	None	(3)*	Yes
4	Rechipper Conveying	None	0.8	Yes
5	Chipfines Conveying	None	1.6	Yes
6	Green End and Trash Conveying	None	0.2	Yes
7	Sander Dust Conveying	None	2.9	Yes

* Only one of 3A, 3B and 3C operates at any given time.

4-3-80 Called Frank & asked if this should be 1.2 #/#. He is to check & call. He called back & confirmed it should be 1.2 #/#.

JACOB D. VARN
SECRETARY

G. DOUG DUTTON
SUBDISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER SUBDISTRICT

April 7, 1980

file

Mr. Gerald Tice, Environmental Engineer
Georgia-Pacific Corporation
Post Office Box 1808
Augusta, Georgia 30903

Dear Mr. Tice:

Putnam County - AP
Plywood Plant - Conveying System

In response to the March 27, 1980 letter EPA sent to you and discussions with Frank Darabi, P.E., the conveying system permit AC54-23131 is revised to include emission vents listed below with the allowable emissions limit for each:

Vent		Allowable emissions limit (lb/hr)
1-A*	(3A)**	(3)***
1-B	(3B)	(3)***
1-C	(3C)	(3)***
2	(4)	0.8
3	(5)	1.6
4	(6)	0.2
6	(7)	1.2

*ID from Process Flow Diagram
**ID from Table attached to 3/27/80 EPA letter
***Only one of 1-A, 1-B, 1-C is allowed to operate at any given time.

In lieu of test sampling these vents, the emissions will be limited to less than 20% opacity in Chapter 17-2.05(1)(a), FAC. However, sampling of these vents for compliance with the listed allowable emission limits will be required on request.

Sincerely,

Frank Watkins

Frank Watkins, Jr., P.E.
Subdistrict Engineer

FW:jck

cc: Frank Darabi

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

UNITED STATES OF AMERICA, Plaintiff, V. GEORGIA-PACIFIC CORPORATION, Defendant	CIVIL ACTION NO.

CONSENT DECREE

Chris: 9/30

Can you give this

to Mr. Holton?

Thanks

Hui

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

UNITED STATES OF AMERICA, Plaintiff, V. GEORGIA-PACIFIC CORPORATION, Defendant	)	CIVIL ACTION NO.

CONSENT DECREE

WHEREAS, Plaintiff, the United States of America (hereinafter "Plaintiff" or "the United States"), on behalf of the United States Environmental Protection Agency (herein, "EPA") has filed a Complaint alleging that Defendant, Georgia-Pacific Corporation (herein, "G-P" or "Defendant") commenced construction of major emitting facilities and major modifications of major emitting facilities in violation of the Prevention of Significant Deterioration ("PSD") requirements at Part C of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7470-7492, and the regulations promulgated thereunder at 40 C.F.R. § 52.21 (the "PSD Rules");

WHEREAS, Plaintiff further alleged that Defendant commenced construction of emitting facilities or modified emitting facilities without first obtaining the appropriate preconstruction permits required by the State Implementation Plans ("SIPs") approved pursuant to 42 U.S.C. § 7410;

WHEREAS, Plaintiff further alleged that Defendant failed to properly provide information to state and Federal regulatory agencies concerning potential air emissions from Defendant's facilities;

WHEREAS, EPA issued Notices of Violation with respect to such allegations to the Defendant on August 5, 1994 and May 18, 1995 (the "NOVs");

WHEREAS, the Defendant has denied and continues to deny the violations alleged in the NOVs and the Complaint;

WHEREAS, the United States and the Defendant have agreed that settlement of this action is in the best interest of the parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter; and

WHEREAS, the United States and the Defendant have consented to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaint or Notices of Violation, it is hereby ORDERED AND DECREED as follows:

I. JURISDICTION AND VENUE

1. The Complaint states a claim upon which relief can be granted against the Defendant under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355. This Court has jurisdiction of the subject matter herein and over the

parties consenting hereto pursuant to 28 U.S.C. § 1345 and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. The Defendant does not admit and furthermore reserves its rights to contest the jurisdiction of this Court over, and to award relief for, subject matters or activities not expressly covered or required by this Consent Decree. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). The Parties agree that nothing in this Consent Decree nor the fact that it is being entered into shall constitute any admission of fact or conclusion of law.

II. APPLICABILITY

2. The provisions of this Consent Decree shall apply to and be binding upon the United States and upon the Defendant as well as the Defendant's officers, employees, agents, successors and assigns. In the event Defendant proposes to sell or transfer any of its real property or operations subject to this Consent Decree, it shall advise in writing to such proposed purchaser or successor-in-interest of the existence of this Consent Decree, and shall send a copy of such written notification by certified mail, return receipt requested, to EPA before such sale or transfer, if possible, but no later than the closing date of such sale or transfer. The Defendant shall provide a copy of this Consent Decree to the vendor(s) supplying the VOC control technology systems required by Part IV of this Consent Decree.

III. FACTUAL BACKGROUND

3. Defendant owns and operates the following plywood facilities in the United States:

Peterman, Alabama
Talladega, Alabama
Crossett, Arkansas
Fordyce, Arkansas
Hawthorne, Florida
Cedar Springs, Georgia (no longer in operation)
Madison, Georgia
Monticello, Georgia
Warm Springs, Georgia
Gloster, Mississippi
Louisville, Mississippi
Taylorsville, Mississippi
Dudley, North Carolina
Whiteville, North Carolina
Prosperity, South Carolina
Russellville, South Carolina
Emporia, Virginia

4. Defendant owns and operates a medium density fiberboard ("MDF") facility in Holly Hill, South Carolina.

5. Defendant owns and operates the following particleboard facilities in the United States:

Martell, California
Vienna, Georgia
Gaylord, Michigan
Oxford, Mississippi
Taylorsville, Mississippi
Louisville, Mississippi
Russellville, South Carolina
South Boston, Virginia

6. Defendant owns and operates the following oriented strand board ("OSB") facilities in the United States:

Woodland, Maine
Dudley, North Carolina
Grenada, Mississippi
Skippers, Virginia

7. The United States issued the NOVs to G-P alleging that G-P failed to properly document and identify to the appropriate permitting authorities potential emissions increases associated with the facilities identified in paragraphs 3 through 6.

IV. COMPLIANCE PROGRAM

A. PLYWOOD PLANTS

8. G-P shall obtain PSD or federally enforceable state minor source permits, based on reductions achieved through technology as specified in Paragraph 10 (except that the 95% VOC destruction efficiency to be specified to equipment vendors will not be contained in these permits) and Paragraph 11, for plywood dryers at the following ten plywood plants at issue in this case:

Peterman, Alabama
Talladega, Alabama
Crossett, Arkansas
Fordyce, Arkansas
Hawthorne, Florida
Madison, Georgia
Monticello, Georgia
Dudley, North Carolina
Louisville, Mississippi
Taylorsville, Mississippi

9. G-P shall obtain a federally enforceable minor source permit based on reductions achieved through technology as specified in Paragraph 10 (except that the 95% VOC destruction efficiency to be specified to equipment vendors will not be contained in the permit) and Paragraph 11 for dryers at the Skippers, Virginia OSB plant.

10. G-P shall install improved pollution control technology systems for control of volatile organic compounds ("VOCs") consisting of Regenerative Thermal Oxidation ("RTO"), Regenerative Catalytic Oxidation ("RCO") or other EPA-approved equivalent control technology systems ("control technology systems") on "hot zone" exhausts of the veneer dryers at the plants identified in Paragraph 8 and on the rotary chip dryer exhaust at the plant specified in Paragraph 9. G-P will specify in orders placed with equipment vendors that these controls have the design capacity for at least 95% destruction of VOCs.

11. G-P shall capture all VOC emissions from "hot zone" stacks of the veneer dryers and minimize fugitive emissions from dryer doors (through appropriate operation and maintenance procedures) and the "green end" of dryers (through proper balancing of "hot zone" exhausts) at the plants identified in Paragraph 8, and shall capture all VOC emissions from the rotary chip dryer exhaust at the plant specified in Paragraph 9. G-P shall achieve a minimum destruction efficiency of 90% for the captured VOC emissions at all dryers at the plants identified in Paragraphs 8 and 9 as demonstrated by compliance with the requirements of Parts IV.A. and IV.C. The 90% destruction efficiency need not be maintained during periods when the dryer(s) are not operating or during previously scheduled startup and shutdown periods (including bakeouts and washouts), and Force Majeure events (including malfunctions which qualify as Force

Majeure events). These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, G-P shall minimize emissions to the greatest extent practicable. G-P must, at the beginning of every month, record its maintenance schedule for that month. To the extent practical, startup and shutdown of control technology systems will be scheduled during times when process equipment is also shut down for routine maintenance.

12. The schedules for installation, startup, and compliance testing of the control technology systems shall be in accordance with the following:

1. Installation of Control Technology Systems

a. Phase One

i. Within one (1) month from execution of this Consent Decree (hereinafter "execution of the Consent Decree" means the date on which the final signature of the parties required by this Consent Decree is obtained), G-P shall apply for state construction permits and/or construction permit waivers for placement of purchase orders for control technology systems and place purchase orders for plywood dryer control technology systems for initial full-scale prototype plant installations at two of the plywood plants listed in paragraph 8 (hereinafter, these two plants shall be referred to as the "Phase One plants").

ii. Within three (3) months from execution of this Consent Decree, G-P will inform EPA of the type of control technology systems to be installed at the Phase One plants and provide a copy of the preliminary design drawings.

iii. Within four (4) months from execution of this Consent Decree, G-P shall take delivery of the control technology systems and commence installation at the Phase One plants.

iv. Within seven (7) months from execution of this Consent Decree, G-P shall complete installation of the control technology systems and start up controls at the Phase One plants.

v. Within ten (10) months from execution of this Consent Decree, G-P shall complete shake-down and debugging, and commence full-time operation of the control technology systems at the Phase One plants.

vi. Within twelve (12) months from execution of this Consent Decree, G-P shall submit test results demonstrating compliance at the Phase One plants with the destruction efficiency specified in Paragraph 11.

b. Phase Two

i. Within twelve (12) months from execution of this Consent Decree, G-P shall apply for state construction permits and/or construction permit waivers for placement of purchase orders for the control technology systems, and place purchase orders for plywood dryer control technology systems at the remaining eight (8) plywood plants listed in paragraph 8 (hereinafter, these plants shall be referred to as the "Phase Two plants"). At this time G-P shall also inform EPA of the type of control technology systems to be installed at the Phase Two plants and provide a copy of preliminary design drawings.

ii. Within twenty-six (26) months from execution of this Consent Decree, G-P shall complete shake-down and debugging, and commence full-time operation of the control technology systems for the Phase Two plants.

iii. Within thirty (30) months from execution of this Consent Decree, G-P shall submit test results demonstrating compliance with the destruction efficiency requirement specified in Paragraph 11 at the Phase Two plants.

c. Skippers, Virginia OSB Plant

13. As to the Skippers, Virginia OSB plant, G-P shall apply for a federally enforceable minor source permit within 120 days from execution of this Consent Decree; G-P shall place the purchase order for the control technology systems within 30 days of the issuance of the permit, and within 12 months from execution of this Consent Decree, G-P shall obtain the permit, install and start up the control technology systems and demonstrate compliance with the destruction efficiency specified in Paragraph 11 above.

2. Option To Install Alternate Control Technology

14. Subject to the requirements of this Paragraph and Paragraph 15, Defendant may elect to install an alternate control technology system, in lieu of the RTO-based or RCO-based control technology systems for any Phase Two plant provided that such alternate control technology system meets the destruction efficiency requirement provided in Paragraph 11, and further that any such alternate control technology system is installed in accordance with the schedules set out for Phase Two plants in paragraph 12(b).

15. If Defendant decides to install an alternate control technology system at any Phase Two plant, it shall advise the United States of its intent to do so not later than 60 days before it is required by the schedules in Paragraph 12(b) to contract for the procurement of the control technology system.

At this time the Defendant shall provide to EPA preliminary design information for the proposed control technology system and data which demonstrate that the proposed control technology system will meet the destruction efficiency provided in Paragraph 11. EPA will advise G-P within 30 days of receipt of this information as to whether G-P may go forward with the installation of the proposed alternative control technology system. In the event that Defendant's proposal to install the alternate control technology system is under review by EPA beyond 30 days, EPA shall agree to extend any or all affected Phase Two plant deadlines or milestones by an equivalent period of time.

3. Initial Compliance Determination

16. To demonstrate initial compliance with the destruction efficiency requirement specified in Paragraph 11, G-P will undertake compliance testing at the Phase One and Phase Two plants and the Skippers, Virginia OSB plant in accordance with the schedules set out in paragraphs 12 and 13 and the test protocol attached as Schedule A to this Consent Decree.

17. EPA shall advise G-P within 30 days of receipt of the compliance test results whether the destruction efficiency required by this Consent Decree as set out in paragraph 11 have been met. If EPA advises that this efficiency has not been met, G-P will be subject to the stipulated penalties set forth in paragraph 51(g)(1).

4. Subsequent Compliance Determination

18. G-P shall conduct, at least bi-annually (or more frequently as agreed by the parties), compliance demonstration tests in accordance with Schedule A to show compliance with the destruction efficiency requirement set out in Paragraph 11. Failure to achieve the destruction efficiency provided in Paragraph 11 from the dryers as shown by such tests shall subject G-P to stipulated penalties as set forth in Paragraph 51(g)(1).

B. PERMITS

19. G-P shall apply for PSD or federally enforceable state minor source permits as triggered by the VOC emissions from plywood dryers at the Phase One plants as soon as possible, but in no event later than 120 days after execution of this Consent Decree.

20. G-P shall apply for PSD or federally enforceable state minor source permits as triggered by the VOC emissions from plywood dryers at the Phase Two plants as soon as possible, but in no event later than twelve months after execution of this Consent Decree.

21. G-P agrees to obtain all appropriate federally enforceable permits for all of the plywood press modifications identified in Schedule B hereto. G-P will apply to the applicable state regulatory authority for such permits as the state determines are necessary as soon as practicable, but in no event later than 120 days after execution of this Consent Decree. The United States and G-P agree to abide by the state

determination, in each state where the facilities are located, of the appropriate permits and control technology, if any, required for the press modifications.

22. G-P has stated that it is contemplating either permanently closing the existing South Boston, Virginia, particleboard facility within one year of execution of this Consent Decree, or building a new particleboard facility adjacent to the existing South Boston particleboard facility and permanently closing the existing facility upon completion of the new facility. G-P shall provide the United States with notification within one year of execution of this Consent Decree of its intentions concerning the South Boston, Virginia facility. If G-P elects to build a new facility, it shall perform a PSD applicability analysis for the new facility that includes VOC emissions from all relevant equipment, including dryers and presses, and not later than two and one-half years after execution of this Consent Decree will close the existing South Boston facility. Based on the PSD applicability analysis, G-P will obtain the appropriate permits prior to start-up of the new facility. If G-P notifies EPA of its intent to close the facility within this one-year period, and then continues to operate the existing facility later than one year after execution of this Consent Decree, it will be subject to stipulated penalties as set forth in Paragraph 51(c), and G-P shall do a PSD

applicability analysis for the 1986 dryer modification at the existing South Boston facility.

23. G-P will apply to the state regulatory authority for a federally enforceable minor modification permit for the alleged 1989 dryer modification at the Gloster, Mississippi plywood plant. The permit application for this permit will state that the plant's physical production capacity after the alleged modification is 307,000 MSF, 3/8" basis. G-P will apply to the state regulatory authority for this permit as soon as practicable, but in no event later than 120 days after execution of this Consent Decree.

24. G-P will apply to the state regulatory authority for a federally enforceable synthetic minor source permit for the alleged 1994 dryer modification at the Holly Hill, S.C., MDF plant that will limit monthly production to 12.31 MMSF, 3/4" basis for five-week months, and 9.85 MMSF 3/4" basis for four-week months, and a weekly production limit of 2.8 MMSF, 3/4" basis. Until the state permit is obtained that contains these permit limits, these limits shall be imposed through this Consent Decree.

C. **PARAMETRIC MONITORING**

25. The provisions of this Part IV.C. are intended to assure continuous compliance with this Consent Decree and to allow G-P to quickly determine the need for maintenance or adjustment of the control technology systems. In order to

achieve and maintain the destruction efficiency provided in Paragraph 11 that is required of the control technology systems, G-P will establish a continuous parametric monitoring system at each of the plants identified in paragraphs 8 and 9. Parametric monitoring shall be conducted by establishing, through testing or otherwise, the parameters needed to be controlled (e.g., temperature, pressure drop across the system, and airflow for an RTO device; and catalyst temperature, pressure drop across the system and airflow from an RCO device), and the appropriate operating criteria to be maintained for each such parameter in order to ensure proper operation of the control technology system installed at a plant.

26. Immediately following the commencement of full-time operations of the control technology system required by this Consent Decree, but in no event later than twelve months from the execution of this Consent Decree for the Phase One plywood plants, thirty months for the Phase Two plywood plants, and twelve months for the Skippers, Virginia OSB plant, G-P shall commence a study, not to exceed six months in duration, of the control technology system to establish the parameters needed to be controlled and monitored as well as the appropriate operating criteria to be maintained for each such parameter in order to ensure proper operation of the control technology system. The results of such study and the associated proposed parametric monitoring protocol shall be submitted to EPA for review and

approval no later than six months from the date of the initial compliance testing as set out in paragraphs 12 and 13. Each study should establish for the affected unit an appropriate relationship between two or more operational parameters (depending upon which control technology system is implemented by G-P) and the destruction efficiency requirement provided in paragraph 11 of this Consent Decree. G-P should include in the study for each facility its proposed process parameters to be monitored and appropriate operating criteria. Studies for the Phase Two plants may be abbreviated in scope to the extent that determinations made during the studies for either the Phase One plants or earlier Phase Two plants are applicable to the subsequent studies. EPA will have 30 days to review and comment on the results of each facility's study and the proposed process parameters, during which time EPA will have the opportunity to request clarification or additional data from G-P to support the proposed parameters before determining that the study is complete. Once EPA determines that the study is complete, EPA will have 30 days to approve or disapprove the proposed parameters. The parametric monitoring system developed for each facility shall be incorporated into that facility's Title V permit by the permitting authority.

27. Within six months after EPA's approval of any parametric monitoring program for a control technology system at a plant, G-P shall have the necessary data recording equipment

for the monitoring program installed and operating at that plant, or have established manual data recordkeeping procedures.

28. No later than six months after EPA's approval of the parametric monitoring program, G-P shall begin monitoring and recording of the parameters. G-P shall monitor and record at each facility listed in Paragraphs 8 and 9 of this Consent Decree each parameter at least every 15 minutes and shall average the readings over a 12-hour period. To demonstrate compliance, G-P will provide EPA with a summary of its parametric monitoring data in accordance with Part V. Failure to monitor parameters at any of the facilities listed in Paragraphs 8 and 9 will subject G-P to stipulated penalties as set forth in Paragraph 51(d). Failure to record the results of parametric monitoring at any of the facilities listed in Paragraphs 8 and 9 will subject G-P to stipulated penalties as set forth in Paragraph 51(h). Failure to report the results of parametric monitoring at any of the facilities listed in Paragraphs 8 and 9 will subject G-P to stipulated penalties as set forth in Paragraph 51(h). Failure to operate the control technology system within the approved parametric criteria will subject G-P to stipulated penalties as set forth in Paragraph 51(g)(2).

29. G-P's parametric monitoring devices will be calibrated or reevaluated based on compliance demonstration tests at the affected units as required in Paragraph 18, for the life of this Consent Decree. G-P shall provide EPA with an annual report

But should be in a T5 Permit before the C.D. expires - See Agenda Item

documenting its calibration or review of the parameters and propose changes if necessary. EPA will have the opportunity to request clarification or additional data from G-P to support the proposed changes. EPA will have 30 days after receipt of G-P's annual report to approve or disapprove any proposed changes to the parameters.

D. ENVIRONMENTAL AUDITS

30. The purpose of the environmental audits required by this Consent Decree is to obligate G-P to continue its review of the Clean Air Act compliance status, programs and practices of the Defendant's wood panel plants identified in Paragraphs 3-6, except lumber kilns, after implementation of the control technology systems, and testing requirements of this Consent Decree.

31. G-P has submitted to the United States for review a summary description of its environmental audit program, including the procedures and protocol, and the United States has agreed that G-P's current audit program (the "Audit Program") will satisfy the requirements of this Part IV.D. of this Consent Decree.

32. The Audit Program shall continue to include an evaluation of the recordkeeping practices, operating practices, pollution control strategies and technology of the Defendant as it relates to compliance with the Act at the plants identified in Paragraphs 3-6.

33. This Audit Program shall be conducted by G-P's internal environmental audit group ("Audit Group"). The Audit Group shall conduct its independent audit and prepare a report of its findings and recommendations.

34. Prior to conducting any audits of the plants identified in Paragraphs 3-6 after execution of this Consent Decree, the Audit Group must review for each plant the following as established from either the date of execution of this Consent Decree or from the last audit following execution of this Consent Decree, whichever is later, to the present:

1. general facility layout and plant operations;
2. plant production capacities;
3. permitting effect under the Act of any modifications to existing sources or the installation of new emissions source equipment;
4. emission monitoring, recordkeeping and reporting procedures;
5. applicable permit terms and conditions;
6. compliance history under the Act at each plant;
7. technical issues that affect the ability of the plant to comply with all applicable requirements of the Act, including state and Federal regulations and permit terms and conditions issued pursuant to the Act; and
8. plant management practices and procedures to assure compliance with the Act's requirements.

35. The Audit Program includes use of auditing protocols, procedures, and specific tasks for the audit, but does not restrict the Audit Group from conducting such inquiries as may be necessary to accomplish the purposes of the audit.

36. The Audit Program also includes a schedule for conducting the audit, and a schedule for the completion of all tasks established for the audit.

37. The Audit Group shall focus on determining compliance with applicable regulations under the Act as of the date of the audit. The Audit Group shall have access to and may review any records which will assist it in determining the Defendant's current compliance with applicable regulatory requirements of the Act, including state permitting records and historical records, as may be necessary.

38. G-P shall continue to employ a third party consultant's periodic participation in actual audits and assistance to the Audit Group throughout the process to ensure that G-P's audit procedures are followed. G-P will implement appropriate recommendations from the audit consultant to change the Audit Program.

39. The Audit Group shall have access to all units, areas, equipment, and structures at G-P's wood panel plants identified in Paragraphs 3-6, except lumber kilns, and shall perform an onsite inspection of each listed plant.

40. The Audit Group shall observe and review actual operation and maintenance procedures for the Defendant's wood panel plants identified in Paragraphs 3-6, as needed to determine present compliance with the Act and may request such information as necessary. The facility shall arrange for the collection of

the requested information, and the Audit Group shall be given the opportunity to observe and review such information.

41. G-P shall conduct its audits in accordance with its normal audit cycle/schedule, provided, however, that each of the wood panel plants identified in Paragraphs 3-6 of this Consent Decree, including co-located wood products facilities (except co-located wood kilns), is audited at least once during the life of this Consent Decree.

42. G-P shall submit a final Audit Summary Report in accordance with Paragraph 43 to EPA not later than sixty (60) days after completion of such audit. G-P shall provide two copies of the Audit Summary Report to EPA.

43. The Audit Summary Report shall describe the pertinent results of the audit, including but not limited to the following:

1. the procedures followed during the audit, including any deviations;

2. a description of each of the audited plants, including, where necessary to evaluate current compliance, the regulatory history of the plant(s);

3. the current compliance status of each plant, including any potential compliance issues;

4. any deviations observed during the audit, including identification of any untimely response to malfunctioning control technology systems or exceedances of applicable permit limits;

5. recommendations for corrections of observed deviations as provided in item 4 above and potential improvements or modifications that should be made to the facility's environmental compliance management program or operating

procedures to achieve and/or maintain compliance with all applicable Air Act requirements, and

6. a statement that any failure to comply with the Act detected by the audits has been or will be corrected.

44. G-P shall have the third party auditing consultant review some of the audits conducted at the facilities covered by this Consent Decree as part of the audit consultant's review of G-P's internal Audit Program. The third party consultant shall provide an annual certification to EPA that states as follows:

> I certify under penalty of law that G-P has implemented and followed the procedures outlined in G-P's Audit Program for the past calendar year and has adopted the following changes to its existing Audit Program recommended by me.

V. REPORTING AND RECORDKEEPING

45. Beginning with G-P's first full fiscal quarter beginning after entry of this Consent Decree, the Defendant shall submit a quarterly progress report to EPA within thirty (30) days after the end of each of G-P's fiscal quarters during the life of this Consent Decree. This report shall contain the following:

a. progress report on the implementation of the requirements of Part IV above;

b. weekly and monthly production at the Holly Hill, South Carolina facility to demonstrate compliance with the production limits imposed on that plant by paragraph 24 above;

c. a summary of the parametric monitoring data required by this Consent Decree for the quarter;

d. a description of any problems anticipated with respect to meeting the compliance program requirements; and

e. a description of all SEP implementation activity in accordance with Schedule D of this Consent Decree.

46. The quarterly report shall be certified by the Director of Corporate Environmental Engineering - Building Products as follows:

> I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

VI. CIVIL PENALTY

47. Within thirty (30) calendar days of entry of this Consent Decree, the Defendant shall pay to the United States a civil penalty pursuant to Section 113 of the Act, 42 U.S.C. § 7413 in the amount of six million dollars ($6,000,000.00). The civil penalty shall be paid by cashier's check or certified check in the sum stated above made payable to the "Treasurer, United States of America," and sent to

> United States Attorney
> Northern District of Georgia
> 1800 United States Courthouse
> 75 Spring Street, S.W.
> Atlanta, Georgia 30335

48. A photocopy of the check shall be sent to the United States as set out in the Notice provision of Paragraph 79 of this Consent Decree.

49. No amount of the civil penalty to be paid by G-P shall be used to reduce its federal or state tax obligations.

VIII. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

50. G-P shall implement certain supplemental environmental project(s) ("SEP(s)"), at an aggregate cost of $4.25 million, in accordance with Schedule D to this Consent Decree. G-P agrees that in any public statements regarding the funding of these SEPs, G-P must clearly indicate that these projects are being undertaken as part of the settlement of an enforcement action for alleged Clean Air Act violations. No amount of the $4.25 million to be paid by G-P for SEPs shall be used to reduce its federal or state tax obligations.

IX. STIPULATED PENALTIES

51. The Defendant shall pay stipulated penalties to the United States for each failure by the Defendant to comply with the terms of this Consent Decree. The stipulated penalties will be calculated in the following amounts:

(a) for failure to meet the deadlines for installation of control technology systems and permitting for the Phase One and Phase Two plants, per day per plant:

1st through 30th day after deadline $1,250

31st through 60th day after deadline	$3,000
Beyond 60th day	$6,500

(b) for each exceedance of the weekly or monthly production limits at the Holly Hill facility as specified in paragraph 24 of this Consent Decree, the following penalties:

	Less than or equal to 10% above the production limits	Greater than 10% above the production limits
Exceedance of the Weekly Production limit	$ 750	$2,500
Exceedance of the Monthly production limit	$ 2,500	$8,000

(c) for each day of continued operation of the existing South Boston facility later than one year after execution of this Consent Decree after having notified EPA of its intent to close the facility within this one-year period:

1st through 30th day after deadline	$1,500
31st through 60th day after deadline	$3,250
Beyond 60th day	$5,000

(d) for each day of failure to conduct parametric monitoring at any plant covered by this Consent Decree following six months after EPA's approval of G-P's parametric monitoring program at that plant:

1st through 30th day after deadline	$1,000
31st through 60th day after deadline	$2,000
Beyond 60th day	$5,000

(e) for failure to conduct a compliance test as required by Paragraph 18, or failure to calibrate parametric monitors as required by Paragraph 29, per day per plant:

1st through 30th day after deadline	$1,000
31st through 60th day after deadline	$2,000
Beyond 60th day	$5,000

(f) for failure to implement the SEPs as set forth in Paragraph 50 and Schedule D hereto, $5,000 per day; provided, however, that if G-P has made good faith and timely efforts to complete the SEP(s), and certifies, with supporting documentation, that at least 90 percent of the amount of money which was required to be spent was expended on the SEP(s), no stipulated penalty shall be imposed.

(g)(1) for each failure to achieve the minimum 90% destruction efficiency required by Paragraph 11 for the control technology system as shown by compliance demonstration stack tests, per test:

Less than or equal to 10% below the destruction efficiency set forth in ¶11	Greater than 10% below the destruction efficiency set forth in ¶11
$10,000	$15,000

(g)(2) for the cumulative number of days within any month for which the required parametric monitoring specifications under Part IV.C. are not met, per day per plant:

	Less than or equal to 10% variance from the specified parametric criteria	Greater than 10% variance from the specified parametric criteria
at least two but less than seven days of the month	$1,500	$2,500
at least seven but less than twelve days of the month	$2,500	$5,000
at least twelve days up to the end of the calendar month	$3,750	$7,500

(h) for each failure to submit reports or studies, as required by any part of this Consent Decree or to provide any notice required by this Consent Decree, per day per report or notice:

1st through 30th day after deadline	$350
31st through 60th day after deadline	$750
Beyond 60th day	$1,250

(i) for failure to pay the civil penalty as specified in Part VI of this Consent Decree, $25,000 per day plus interest on the amount overdue at the rate specified in 31 U.S.C. § 3717.

(j) for failure to pay or escrow stipulated penalties, as specified in Paragraph 53 of this section, $2,500 per day per penalty demand.

52. Defendant shall pay stipulated penalties upon written demand by the United States no later than thirty (30) days after Defendant receives such demand. Stipulated penalties shall be paid to the United States in the manner set forth in Part VIII of this Consent Decree.

53. Should Defendant dispute its obligation to pay part or all of a stipulated penalty, it may avoid the imposition of the stipulated penalty for failure to pay a penalty due to the United States, by placing the disputed amount demanded by the United States, not to exceed $50,000 for any given event or related series of events at any one plant, in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of Part XI within the time provided in this Part VIII for payment of stipulated penalties. If the dispute is thereafter resolved in Defendant's favor, the escrowed amount plus accrued interest shall be returned to the Defendant, otherwise the United States shall be entitled to the escrowed amount that was determined to be due by the Court plus the interest that has accrued on such amount, with the balance, if any, returned to the Defendant.

54. The United States reserves the right to pursue any other remedies to which it is entitled, including, but not limited to, additional injunctive relief for Defendant's violations of this Consent Decree. The United States will not

seek stipulated penalties and civil penalties for the same violation of the Consent Decree.

IX. RIGHT OF ENTRY

55. Any authorized representative of the EPA or an appropriate state agency, including independent contractors, upon presentation of credentials, shall have a right of entry upon the premises of Defendant's plants identified herein at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment, and inspecting and copying all records maintained by Defendant required by this Consent Decree. Defendant shall retain such records for a period of five (5) years. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections under Section 114 of the Act, 42 U.S.C. § 7414.

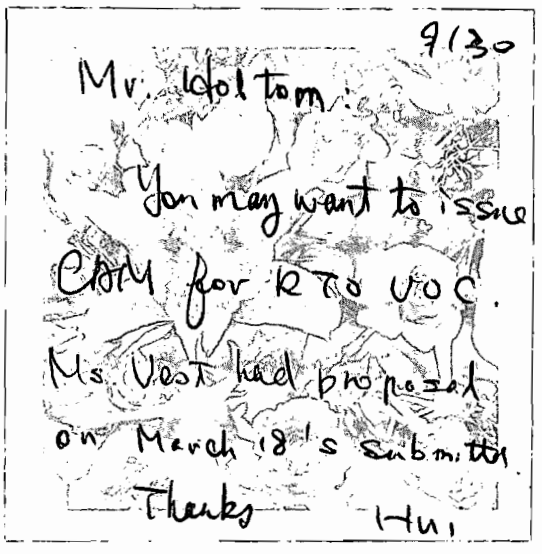
X. FORCE MAJEURE

56. If any event occurs which causes or may cause a delay or impediment to performance in complying with any provision of this Consent Decree, Defendant shall notify the Plaintiff in writing as soon as practicable, but in any event within seven (7) business days of when Defendant first knew of the event or should have known of the event by the exercise of due diligence. In this notice Defendant shall specifically reference this Paragraph of this Consent Decree and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and

the measures taken or to be taken by Defendant to prevent or minimize the delay and the schedule by which those measures will be implemented. Defendant shall adopt all reasonable measures to avoid or minimize such delays.

57. Failure by Defendant to comply with the notice requirements of Paragraph 56 as specified above shall render this Part X voidable by the United States as to the specific event for which the Defendant has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

58. The United States shall notify the Defendant in writing regarding the Defendant's claim of a delay or impediment to performance within thirty (30) days of receipt of the Force Majeure notice provided under Paragraph 56. If the United States agrees that the delay or impediment to performance has been or will be caused by circumstances beyond the control of the Defendant, including any entity controlled by the Defendant, and that the Defendant could not have prevented the delay by the exercise of due diligence, the parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be filed as a modification to this Consent Decree pursuant to the modification procedures established in this Consent Decree. The


9/30
Mr. Holtom:
You may want to issue
CDM for R to U.O.C.
Ms. West had proposal
on March 18's submittal.
Thanks
Hui

Defendant shall not be liable for stipulated penalties for the period of any such delay.

59. If the United States does not accept the Defendant's claim of a delay or impediment to performance, the Defendant must submit the matter to this Court for resolution to avoid payment of stipulated penalties, by filing a petition for determination with this Court. Once the defendant has submitted this matter to this Court, the United States shall have fifteen business days to file its response to said petition. If the Defendant submits the matter to this Court for resolution and the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of the Defendant, including any entity controlled by the Defendant, and that the Defendant could not have prevented the delay by the exercise of due diligence, the Defendant shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

60. The Defendant shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond its control, including any entity controlled by it, and that the Defendant could not have prevented the delay by the exercise of due diligence. The Defendant shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may,

but does not necessarily, result in an extension of a subsequent compliance date or dates.

61. Unanticipated or increased costs or expenses associated with the performance of the Defendant's obligations under this Consent Decree shall not constitute circumstances beyond the control of the Defendant, or serve as a basis for an extension of time under this Part. However, failure of a permitting authority to issue a necessary permit in a timely fashion may be an event of Force Majeure where the failure of the permitting authority to act is beyond the control of the Defendant and Defendant has taken all steps available to it to obtain the necessary permit including but not limited to:

a. submitting a complete permit application;

b. responding to requests for additional information by the permitting authority in a timely fashion;

c. accepting lawful permit terms and conditions; and

d. prosecuting appeals of any unlawful terms and conditions imposed by the permitting authority in an expeditious fashion.

62. Notwithstanding any other provision of this Consent Decree, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of defendant delivering a notice of Force Majeure or the parties' inability to reach agreement.

63. As part of the resolution of any matter submitted to this Court under this Part X, the parties by agreement, or this

Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the United States or approved by this Court. Defendant shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

XI. DISPUTE RESOLUTION

64. The dispute resolution procedure provided by this Part XI shall be available to resolve all disputes arising under this Consent Decree, except as otherwise provided in Part X regarding Force Majeure, provided that the party making such application has made a good faith attempt to resolve the matter with the other party.

65. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the parties to this Consent Decree to another advising of a dispute pursuant to this Part XI. The notice shall describe the nature of the dispute, and shall state the noticing party's position with regard to such dispute. The party receiving such a notice shall acknowledge receipt of the notice and the parties shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days from the receipt of such notice.

66. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the United States and the Defendant, unless the parties' representatives agree to shorten or extend this period.

67. In the event that the parties are unable to reach agreement during such informal negotiation period, the United States shall provide the Defendant with a written summary of its position regarding the dispute. The position advanced by the United States shall be considered binding unless, within thirty (30) calendar days of the Defendant's receipt of the written summary of the United States position, the Defendant files with this Court a petition which describes the nature of the dispute. The United States shall respond to the petition within forty-five (45) calendar days of filing.

68. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Part XI may be shortened upon motion of one of the parties to the dispute.

69. Notwithstanding any other provision of this Consent Decree, in dispute resolution, this Court shall not draw any inferences nor establish any presumptions adverse to either party

as a result of invocation of this Part XI or the parties' inability to reach agreement.

70. As part of the resolution of any dispute submitted to dispute resolution, the parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify, the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. Defendant shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

XII. GENERAL PROVISIONS

71. Effect of Settlement. This Consent Decree is not a permit; compliance with its terms does not guarantee compliance with all applicable Federal, State or Local laws or regulations.

72. G-P shall be able to use or rely on the emission reductions generated as a result of the control technology systems installed at the plants identified in Paragraphs 8 and 9 of this Consent Decree in any Federal or State emission averaging, banking, trading, or similar emission compliance program only to the extent of any reductions in excess of 95 percent of VOCs removed pursuant to the provisions of Paragraphs 10 and 11.

73. Satisfaction of all of the requirements of this Consent Decree constitutes full settlement of and shall resolve all civil and administrative liability of the Defendant to the United

States for PSD and minor source permitting violations covering all criteria pollutants for the modifications listed in Schedule C to this Consent Decree, any other violations alleged in the August 5, 1994 and May 18, 1995 NOVs, or in the United States' Complaint.

74. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Defendant of its obligation to comply with all applicable Federal, State and Local laws and regulations. Subject to Paragraph 73, nothing contained in this Consent Decree shall be construed to prevent or limit the United States' rights to obtain penalties or injunctive relief under the Act or other federal, state or local statutes or regulations, including but not limited to, Section 303 of the Act, 42 U.S.C. § 7603.

75. Third Parties. This Consent Decree does not limit, enlarge or affect the rights of any party to this Consent Decree as against any third parties.

76. Costs. Each party to this action shall bear its own costs and attorneys' fees.

77. Public Documents. All information and documents submitted by the Defendant to the United States pursuant to this Consent Decree shall be subject to public inspection, unless subject to legal privileges or protection or identified and supported as business confidential by the Defendant in accordance with 40 C.F.R. Part 2.

78. Public Comments. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and consideration of any comments.

79. Notice. Unless otherwise provided herein, notifications to or communications with the United States or the Defendant shall be deemed submitted on the date they are postmarked and sent either by overnight receipt mail service or by certified or registered mail, return receipt requested. Except as otherwise provided herein, when written notification to or communication with the United States, EPA, or the Defendant is required by the terms of this Consent Decree, it shall be addressed as follows:

As to the United States:

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044

United States Attorney
Northern District of Georgia
1800 United States Courthouse
75 Spring Street, S.W.
Atlanta, Georgia 30335

As to the U.S. EPA:

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance

Environmental Protection Agency
401 M Street, S.W.
Mail Code 2242A
Washington, DC 20460

Laxmi Kesari, Multimedia Enforcement Division
Office of Enforcement and Compliance Assurance
Environmental Protection Agency
401 M Street, S.W.
Mail Code 2248A
Washington, DC 20460

and
the EPA Regional Administrator for the region in which the facility is located

As to Georgia-Pacific Corporation:

Gordon R. Alphonso
Senior Counsel
Georgia-Pacific Corporation
133 Peachtree Street, N.E.
Atlanta, Georgia 30303

Richard A. Moser
Director - Environmental Engineering
Building Products
Georgia-Pacific Corporation
133 Peachtree Street, N.E.
Atlanta, Georgia 30303

80. Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.

81. Modification. There shall be no modification of this Consent Decree without written approval by both parties to this Consent Decree, or by Order of the Court.

82. Continuing Jurisdiction. The Court retains jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree

and to take any action necessary or appropriate for its interpretation, construction, execution, or modification. During the term of this Consent Decree, any party may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XIII. TERMINATION

83. This Consent Decree shall be subject to termination upon motion by either party after the Defendant satisfies all requirements of this Consent Decree, including payment of all penalties that may be due to the United States under this Consent Decree, installation of control technology systems as specified herein, the receipt of all permits specified herein, EPA's receipt of the first quarterly progress report following the conclusion of one year's operation of the EPA-approved parametric monitoring system for the plants listed in Paragraphs 8 and 9 of this Consent Decree, and G-P's submission of a final report indicating that G-P has satisfied the requirements set forth in Schedule D and that all obligations for implementation of SEPs have been met. At such time, if the Defendant believes that it has maintained compliance with the requirements of this Consent Decree and the permits specified herein, and has paid the civil penalty and any stipulated penalties required by this Consent Decree, then the Defendant shall so certify to the United States,

and unless the United States objects in writing with specific reasons within 60 days of receipt of the certification, the Court shall order that this Consent Decree be terminated on Defendant's motion. If the United States so objects to the Defendant's certification, then the matter shall be submitted to the Court for resolution under Paragraphs 67-70 of this Consent Decree. If the parties cannot agree on Defendant's certification, then the disputing parties shall submit this matter to the Court for resolution. In such case, the Defendant shall bear the burden of proving that this Consent Decree should be terminated.

FOR PLAINTIFF, UNITED STATES OF AMERICA,

Dated: July 17, 1996

Lois J. Schiffer
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice
10th & Pennsylvania Avenue, N.W.
Washington, DC 20530

Dated: July 17, 1996

Robert H. Oakley
Senior Counsel
Environment and Natural Resources Division
U.S. Department of Justice
1425 New York Avenue, N.W.
Washington, DC 20005

Dated: July 17, 1996

Dianne Shawley
Senior Attorney
Environment and Natural Resources Division
U.S. Department of Justice
1425 New York Avenue, N.W.
Washington, DC 20005

Kent Alexander

Dated: 7/17/96

Kent Alexander
United States Attorney
Georgia Bar No. 008893
Northern District of Georgia
1800 United States Courthouse
75 Spring Street, S.W.
Atlanta, Georgia 30335

Dan Caldwell

Dated: 7/18/96

Dan Caldwell
Georgia Bar No. 102510
Assistant U.S. Attorney
United States Attorney's Office
Northern District of Georgia
1800 United States Courthouse
75 Spring Street, S.W.
Atlanta, Georgia 30335

Dated: 7/16/96

Jerome MacLaughlin
Attorney
Air Enforcement Division
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, DC 20460

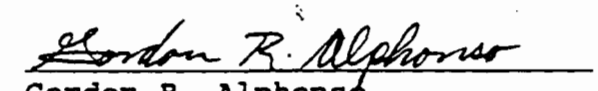
Dated: 7/17/96

Steven A. Herman
Assistant Administrator
Office of Enforcement and Compliance
Assurance
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, DC 20460

FOR DEFENDANT, GEORGIA-PACIFIC CORPORATION

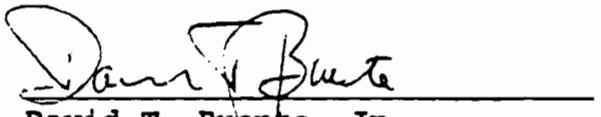
Dated: 7/17/96

James F. Kelley
Senior Vice President - Law
and General Counsel
Georgia-Pacific Corporation
133 Peachtree Street, N.E.
Atlanta, Georgia 30303



Dated: 7/17/96

Gordon R. Alphonso
Senior Counsel
Georgia-Pacific Corporation
133 Peachtree Street, N.E.
Atlanta, Georgia 30303



Dated: 7/17/96

David T. Buente, Jr.
Sidley & Austin
1722 Eye Street, N.W.
Washington, D.C. 20006

So entered in accordance with the foregoing this _____ day of _____, 1996.

_____
United States District Court Judge
for the Northern District of
Georgia

TABLE 1: MONITORING APPROACH

EMISSION UNIT 001 – ESP	
	Indicator No. 1
I. Indicator Measurement Approach	Power (in Watts) The secondary voltage and secondary milliamps for each TR set will be read from the meters in place on the ESP. Parameters to Monitor: Performance of the ESP will be measured by the secondary kilovolts and secondary milliamps for each cell of the ESP. The readings from each TR set will be recorded once each day to determine the power to each cell of the ESP. $P_t = V_1I_1 + V_2I_2 + V_3I_3$ P_t = Total ESP power (watts) V_1 = Secondary voltage (kV), ESP field 1 I_1 = Secondary current (ma), ESP field 1 V_2 = Secondary voltage (kV), ESP field 2 I_2 = Secondary current (ma), ESP field 2 V_3 = Secondary voltage (kV), ESP field 3 I_3 = Secondary current (ma), ESP field 3
II. Indicator Range	An excursion is defined as any daily determination of the ESP power level less than 50,000 watts. An excursion will trigger an investigation of the occurrence, corrective actions, and a reporting/documentation requirement.
III. Performance Criteria	
A. Data Representativeness	ESP secondary voltage and secondary current for fields 1 and 2 are recorded manually at least once per day.
B. Verification of Operational Status	Not Applicable
C. QA/QC Practices and Criteria	The voltmeter and ammeter will be calibrated and maintained as required by the manufacturer, but no less than annually.
D. Monitoring Frequency	The power will be calculated from secondary kilovolt and milliamp readings to be taken at least once per day. The reading will consist of averaging 4 readings approximately 15 minutes apart, over a one hour period
E. Data Collection Procedures	The secondary kilovolt and milliamp readings will be taken manually from the voltmeter and ammeter. The values for each cell will be multiplied and then added together to determine the status.
F. Averaging Period	Four readings, approximately 15 minutes apart, over a one-hour period.

Georgia-Pacific Corporation Hawthorne Plywood Plant
CAM Plan for Electro-Static Precipitator for Particulate Matter Control
AIRS ID 1070015: Project Number 004

I. Background

A. Emissions Unit

Description:	Waste-wood Fired Boiler
Manufacturer:	Zurn
Capacity:	224 MMBtu/hour
Facility:	Hawthorne Plywood Plant 223 Gordon Chapel Road Hawthorne, Florida 32640

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation:	Permit 1070015-001-AV
Emissions limit:	0.10 lb/MMBtu (PM) 22.4 pounds per hour 98.11 tons per year

C. Control Technology

Description:	Electro-static Precipitator (ESP)
Manufacturer:	PPC Industries 3-cell, model 2OR-1330-3712S
Capacity:	99,100 ACFM

II. Monitoring Approach

Parameters to Monitor: Performance of the ESP will be measured by the secondary kilovolts and secondary milliamps for each cell of the ESP. The readings from each TR set will be recorded once each day to determine the power to each cell of the ESP.

$$P_t = V_1 I_1 + V_2 I_2$$

Where:

P_t = Total ESP power (watts)
V_1 = Secondary voltage (kV), ESP field 1
I_1 = Secondary current (ma), ESP field 1
V_2 = Secondary voltage (kV), ESP field 2
I_2 = Secondary current (ma), ESP field 2

I.	Indicator	Power in Watts
	Measurement Approach	The secondary voltage and secondary milliamps for each TR set will be read from the meters in place on the ESP. Parameters to Monitor: Performance of the ESP will be measured by the secondary kilovolts and secondary milliamps for each cell of the ESP. The readings from each TR set will be recorded once each day to determine the power to each cell of the ESP. $P_t = V_1I_1 + V_2I_2$ P_t = Total ESP power (watts) V_1 = Secondary voltage (kV), ESP field 1 I_1 = Secondary current (ma), ESP field 1 V_2 = Secondary voltage (kV), ESP field 2 I_2 = Secondary current (ma), ESP field 2
II.	Indicator Range	Any two consecutive determinations of the ESP power level, that are less than ninety (90) percent of the average value established during the test; = 51,800 watts.
III.	Performance Criteria A. Data Representativeness	The data for the kilovolt and milliamp readings were taken during the Boiler stack test taken on May 7, 2003. Data has been collected daily from April 21, 2003 through July. The data during normal operations is similar to the data taken during the test.
	B. Verification of Operational Status	Results of stack test on May 7, 2003 are attached.
	C. QA/QC Practices and Criteria	Calibrate the voltmeter and ammeter at least annually.
	D. Monitoring Frequency	The power will be calculated from secondary kilovolt and milliamp readings to be taken at least once per day. The reading will consist of averaging 4 readings approximately 15 minutes apart, over a one hour period
	Data Collection Procedures	The secondary kilovolt and milliamp readings will be taken manually from the voltmeter and ammeter. The values for each cell will be multiplied and then added together to determine the status.
	Averaging period	Four readings approximately 15 minutes apart over a one-hour period.

MONITORING APPROACH JUSTIFICATION

I. Background

The emissions unit (EU) consists of the boiler and related appurtenances in the steam production area. The process consists of fuel feeders, a grate, steam tubes, fire box, heat exchangers, and duct work. The boiler operates continuously when the plant is in normal operation. Wood waste is spread on the grate, where it burns to heat water in the tubes. Exhaust gases pass across an economizer then through a multi-clone, after which they pass through the ESP. The boiler is pressurized by a forced-draft fan, which pushes the exhaust gases through the system.

A voltmeter and ammeter for secondary kilovolts and secondary milliamps are currently on the ESP for each TR set of the ESP.

II. Rationale for Selection of Performance Indicators

The most reliable and practical parameters for the plant personnel to monitor are the secondary kilovolts and secondary milliamps to calculate the Power. Power is an indicator of the ESP's performance. To comply with the applicable emission limit a minimum power level must be maintained. The power will drop when a malfunction occurs which causes less particulate to be charged and collected and hence an indicator of problems that require attention.

III. Rationale for Selection of Indicator Ranges

The indicator ranges of less than 90% of the average power was based on the variability of the Power values during the test taken on May 7, 2003. That value will be P_t =51, 810 watts. If two consecutive days of readings fall below this indicator value, then the possibility of problems with the ESP will be investigated to determine whether there is an issue. The issue will be reviewed and documented. An excursion has been defined as two consecutive days of readings below the indicator value to account for fluctuations in the operations.

If it drops below 90%, what is the PM Emiss Rate?

5/7/2003 (?)

GP Hawthorne ESP KV and mA readings

		Cell 1			Cell 2			Cell 3			
	Time:	Secondary kilovolts	Secondary milliamps	Power (watts) kv x ma	Secondary kilovolts	Secondary milliamps	Power(watts) kv x ma	Secondary kilovolts	Secondary milliamps	Power (watts) kv x ma	Sum of Power
	8:45	50	266	13300	50	466	23300	53	442	23426	60026
Test #1	9:00	45	184	8280	50	456	22800	53	432	22896	53976
	9:15	50	194	9700	50	450	22500	53	428	22684	54884
	9:30	52	264	13728	50	448	22400	53	428	22684	58812
	9:45	53	290	15370	50	458	22900	53	440	23320	61590
Test #1 Average		50	233	11650	50	453	22650	53	432	22896	57196
	10:00	50	222	11100	50	454	22700	54	438	23652	57452
	10:15	53	246	13038	51	458	23358	54	438	23652	60048
	10:30	50	248	12400	50	454	22700	53	432	22896	57996
	10:45	45	128	5760	50	444	22200	53	434	23002	50962
	11:00	45	180	8100	50	445	22250	53	432	22896	53246
Test #2	11:15	49	234	11466	50	454	22700	53	436	23108	57274
	11:30	50	182	9100	50	444	22200	53	430	22790	54090
	11:45	52	236	12272	50	454	22700	53	442	23426	58398
	12:00	50	200	10000	50	448	22400	53	442	23426	55826
	12:15	53	250	13250	50	456	22800	53	448	23744	59794
	12:30	48	168	8064	50	470	23500	53	452	23956	55520
Test #2 Average		50	212	10654	50	454	22717	53	442	23408.33	56779
Test #3	12:45	51	264	13464	49	488	23912	52	468	24336	61712
	1:00	51	220	11220	50	456	22800	53	444	23532	57552
	1:15	53	252	13356	50	446	22300	53	436	23108	58764
	1:30	50	244	12200	49	478	23422	52	450	23400	59022
	1:45	48	216	10368	49	464	22736	52	452	23504	56608
Test #3 Average		51	239	12104	49	466	23040	52	450	23580	58724

Average of all tests: 57566

90 % = 51809.57

$\bar{M} = 57.566$

$\bar{PM} = 0.00398$ lb/mmBTU

Georgia-Pacific

Hawthorne Fla. Plywood Plant | Stack Test 140,000lb. "Zurn Spreader Stoker" | 5/16/2001

E.S.P.

Time; 8:36am Beginning Readings

Test #1	VAC	AAC	KVDC	maDC	KW	Cond. Angle	Spark Rate	Alarms
Cell-1	350	50	42	218	12.4	107*	17	none
Cell-2	456	83	50	472	23	135*	0	none
Cell-3	366	81	53	454	23.9	160	0	none

Time; 00:00am Ending Readings

Test #1	VAC	AAC	KVDC	maDC	KW	Cond. Angle	Spark Rate	Alarms
Cell-1								none
Cell-2								none
Cell-3								none

Boiler

	Integrator Steam Reading	Steam *"Manifold"* Pressure	Steam Flow Lbs. Per Hour.
Begin	396,817	322.4	
End			

Total Steam Produced **(396,817)**

Notes

Georgia-Pacific | Hawthorne Fla. Plywood Plant | Stack Test 140,000lb. "Zurn Spreader Stoker" | 5/14/2001

E.S.P.

Time; 12:50pm Beginning Readings

Test #2	VAC	AAC	KVDC	maDC	KW	Cond. Angle	Spark Rate	Alarms
Cell-1	318	44	50	256	11.1	100	26	none
Cell-2	458	84	50	476	23.7	135	0	none
Cell-3	360	82	52	460	23.9	160	0	none

Time; 1:55pm Ending Readings

Test #2	VAC	AAC	KVDC	maDC	KW	Cond. Angle	Spark Rate	Alarms
Cell-1	344	45	47	226	11.7	123	28	none
Cell-2	456	84	49	476	23.3	133	0	none
Cell-3	364	82	53	458	24.2	160	0	none

Boiler

	Integrator Steam Reading	Steam Pressure *"Manifold"*	Steam Flow Lbs. Per Hour.
Begin	604,550	322	114,312
End	713,800	321	100,651
Total Steam Produced	**109,250**		

Notes

#2 DRYER WAS DOWN BECAUSE OF A INFEED JAM FOR 15 MINUTES.

Georgia-Pacific | Hawthorne Fla. Plywood Plant | Stack Test 140,000lb. "Zurn Spreader Stoker" | 5/14/2001

E.S.P.

Time; 2:12PM Beginning Readings

Test #3	VAC	AAC	KVDC	maDC	KW	Cond. Angle	Spark Rate	Alarms
Cell-1	358	50	49	232	11.7	107	22	none
Cell-2	462	85	50	474	23.7	136	0	none
Cell-3	366	81	53	454	23.6	160	0	none

Time; 3:15pm Ending Readings

Test #3	VAC	AAC	KVDC	maDC	KW	Cond. Angle	Spark Rate	Alarms
Cell-1	350	48	49	280	8.9	106	17	none
Cell-2	364	84	50	476	23.8	143	0	none
Cell-3	364	80	52	452	24.3	160	0	none

Boiler

	Integrator Steam Reading	Steam Pressure *"Manifold"*	Steam Flow Lbs. Per Hour.
Begin	750,640	322	120,000
End	866,450	321	106,000

Total Steam Produced **115,810**

Notes

Holtom, Jonathan

From:	Kirts, Christopher
Sent:	Thursday, August 21, 2003 12:00 PM
To:	Holtom, Jonathan
Cc:	Liang, Hui
Subject:	GP Plywood Hawthorne CAM

Please find listed here the test results that NED has for the boiler in conjunction with the ESP:

	HEAT INPUT RATE			PARTICULTE EMISSIONS	
	%	MMBTU/hr		lbs/MMBTU	New Unit
April 18, 1995	73.7	165		0.016	~~69.74~~
May 17, 1996	63.4	142		0.012	156.2
May 22, 1997	65.6	147		0.0055	
May 07, 1998	92.0	206		0.011	
6 7 1999	76.8%	172.0	3.71	0.0216	
5 16 2000	77.4%	173.70	1.31	0.0075	
May 15, 2001	?	?106.5?	0.82 lb/M	0.0077	← ?
May 16, 2002	73.7	165		0.00235	
May 06, 2003	69.4	157 (172)		0.00398	

0.15

plant capacity 224 MMBTU/hr

April 24, 2003

Mr. Martin Shorey, Plant Manager
Georgia-Pacific Corporation, Hawthorne Plywood Plant
223 Gordon Chapel Road
Hawthorne, FL 32640

Dear Mr. Shorey:

Putnam County – Air Permitting
Georgia-Pacific Corporation, Hawthorne Plywood Plant
AIRS ID Number 1070015; Project Number 004
Request For Additional Information

In accordance with Section 62-4.055(1), Florida Administrative Code (F.A.C.), and Chapter 120, Florida Statutes, (F.S.), the Department has reviewed the subject application and the additional information response received March 27, 2003, and has determined that the following information needs to be submitted before the application can be further processed.

Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

Regarding PM Emissions From the Waste Wood-Fired Boiler (EU 001)

1. On March 27, 2003, the Department received the response letter for additional information dated January 29, 2003. It is stated in this letter that Georgia -Pacific was removing the request to reduce the PM limit for this emission unit from the permit application. On April 17, 2003, however, Margarete Vest held a telephone discussion with Frank Alvarez concerning the possibility of reducing the PM limit for this emissions unit.

   Should Georgia-Pacific Corporation wish to pursue the reduction of the PM limit for the boiler, a completed construction permit application, DEP Form No. 62-210.900(1), reflecting the requested PM limit, along with the last 3 PM stack test results for the boiler should be submitted to the Northeast District Office.

2. The implementation plan submitted with the revised CAM plan is not approvable. While 40 CFR 64.6(e)(2) appears to provide a mechanism for the permittee to submit a compliance schedule in order to finalize CAM indicator range development, it limits the time period to no more than 180 days. Please note that if a facility utilizes the full 180 days allowed under 40 CFR 64.6(e)(2) to determine and submit indicator ranges and they are not approved by the Department, the facility will then be out of compliance with 40 CFR Part 64. Therefore, in an effort to avoid such a scenario, it is preferred to maintain your application in an incomplete status just long enough to approve your CAM plan. Pursuant to Rule 62-213.420(1)(b)2., F.A.C., there are not any adverse consequences with this approach providing that your renewal application was submitted in a timely manner thus allowing continued operation under your previous Title V permit pending final action on the renewal application, and you comply with the response deadlines to requests from the Department as stated in Rule 62-213.420(1)(b)4., F.A.C.

3. In the State of Florida, the mechanism for approval of monitoring choices for CAM applicability is through the issuance of a Final Title V permit, which contains the necessary Requirements. Therefore, please evaluate available monitoring equipment and provide a CAM plan based on what is currently at the plant (i.e. the voltage drop across the ESP as mentioned in the first submittal). When revising the CAM plan, keep in mind that pursuant to 40 CFR 64.3(b)(4) emissions units that have the potential to emit greater than 100 tons of regulated pollutants per year must have a monitoring frequency of at least 4 times per hour. Emissions units that have the potential to emit less than 100 tons per year must have a monitoring frequency of at least once per day.

4. The revised CAM update, dated April 14, 2003, stated that compliance tests will be performed which require shutting down portions of the ESP. When performing compliance tests in order to establish the value of the indicator ranges, be advised that shutting down portions of the ESP could be considered a circumvention of the control device and could result in an exceedance of the permitted emission rate. This type of activity requires the issuance of a short-term construction permit. If this is your intention, please contact our office (Northeast District) as soon as possible. However, because CAM indicator ranges should be established to be reflective of normal operations, and should be protective of the permitted emissions limit, it appears that such an activity shouldn't be necessary.

5. Please provide the revised CAM plan following the format of the EPA CAM Technical Guidance Document examples, in both hard copy to the Northeast District Office and electronic (in Word format) to Jonathan Holtom at DARM. The previous submissions generally followed the examples but are lacking the Monitoring Approach Table and need further explanation in the Justification section.

6. Please provide a copy of the emissions test results that were/will be used to select the indicator ranges.

Regarding PM and VOC Emissions From the Veneer Dryers (EU 005)

7. While the RTO does reduce emissions of VOC, the permit does not contain a specific emissions limiting standard for VOC. Therefore, there is no requirement to comply with the CAM regulations for VOC emitted from this emissions unit.

8. From a review of the facility history, it appears that the RTO was a required installation for the purposes of reducing VOC emissions. An RTO is not indicated for use as a PM control device. It is not clear what the origin of the PM limits is, or whether the permitted limits can be met without the RTO. Please provide information regarding the basis of the PM emissions limit. Also, provide a discussion about compliance with the emissions limit and the role of the RTO.

9. If it is determined that CAM truly does apply to this unit, please provide the revised CAM plan following the format of the EPA CAM Technical Guidance Document examples as stated in Item No. 5 above.

The above comments require a written response to the Department within ninety days of receipt of this notice unless additional time is requested pursuant to Rule 62-213.420(1)(b)6., F.A.C.

All information requested must be submitted by the applicant and certified by the professional engineer named in the application. Two copies of the requested information must be submitted.

Should you have any questions concerning this matter, please contact Frank Alvarez at (904) 807-3243.

Sincerely,

Christopher L. Kirts, P.E
District Air Program Administrator

CLK:FFA
cc: Margarete M. Vest, P.E.
Jonathan Holtom, P.E., DEP - DARM

STACK EMISSIONS COMPLIANCE TEST REPORT

On

A WASTE WOOD BOILER, A REGENERATIVE THERMAL OXIDIZER, AND A SANDING SYSTEM BAGHOUSE

At the

HAWTHORNE PLYWOOD FACILITY

In

HAWTHORNE, PUTNAM COUNTY, FLORIDA

Prepared for

GEORGIA-PACIFIC CORPORATION

Test Completion Date: May 7th, 2003
Report Preparation Date: June 18th, 2003

Cubix Project No. 7525-FL1

Prepared by

Cubix Corporation

CORPORATE HEADQUARTERS
9225 US Hwy. 183 South, Austin, TX 78747

SUMMARY OF RESULTS

Georgia-Pacific Corporation (G-P) owns and operates the Hawthorne Plywood Facility in Hawthorne, Putnam County, Florida. Process units at this facility are used in the production of softwood plywood. Emission testing of a regenerative thermal oxidizer (RTO) associated with three dryers, a waste wood boiler, and a sanding system baghouse are the subject of this report.

Table 2 is the executive summary and shows the performance for the three emissions sources during the testing. The performance results are an average of the three test runs on each source, except for visible emissions and RATA results. Visible emissions results from the three sources are based upon the highest 6-minte average recorded during a one-hour test period. The emissions are compared to the permit limits set forth in the FDEP Title V air operation permit. PM emission rates from the RTO and WWB are reported, where applicable to the permit, in terms of pounds per hour (lbs/hr), tons per year (tons/yr), and pounds of particulate matter per million British Thermal Units of fuel burned (lbs/MMBtu). RTO destruction efficiency is reported on a mass basis. Relative accuracy for the RTO flow CEMS was determined from nine out of eleven flow runs and is based on the mean of the reference method.

TABLE 2
Executive Summary

Boiler →

	EU ID No. 001		EU ID No. 003		EU ID No. 005	
Parameter	WWB Results	Permit Limits	Baghouse Results	Permit Limits	RTO Results	Permit Limits
Unit Load (% permitted load)	69.4%	-	na	-	94.9%	-
Veneer Production (MSFH, 3/8" basis)	na	na	36.85	na	47.82	50.4
Heat Input (MMBtu/hr)	155.4	224	na	na	na	na
Visible Emissions (% opacity)	0%	30%	3.1%	5%	0%	5%
PM (lbs/hr)	0.616	33.60	na	na	0.842	6.85
PM (tons/yr)	2.70	146.76	na	na	3.69	30.0
PM (lbs/MMBtu, fuel and waste burned)	0.00398	0.15	na	na	na	na
VOC Destruction Efficiency	na	na	na	na	98.7%	na
Relative Accuracy, Flow CEMS	na	na	na	na	8.42%	20%

Three one-hour test runs were conducted for each required EPA test method on the WWB. Iso-kinetic sampling was conducted for collection of PM and moisture samples in a combined sample train. Concentrations of O_2 and CO_2 from the WWB were determined by averaging triplicate grab samples with a Fyrite® wet

Margarete M. Vest
PO Box 919
Palatka, FL 32178
Ph; 386-312-1191
Fax; 404-949-9750

facsimile transmittal

To: Jonathan Holton **Fax:** 850-921-9533

From: Margarete Vest **Date:** 8/7/2003

Re: Hawthorne Boiler Test Results AIRS ID 1070015 **Pages:** 5

CC:

☐ Urgent x For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Following are the test results for the Georgia-Pacific Corporation Hawthorne boiler w/esp.

Company: Georgia-Pacific Corporation
Facility: Hawthorne Plywood Facility
Hawthorne, Putnam County, Florida
Technicians: RPO, JTH
Source: Waste Wood Boiler Stack

TABLE 6
Waste Wood Boiler
Particulate Matter Test Results

Test Run Designation	WW-PM-1	WW-PM-2	WW-PM-3	
Date	5/7/03	5/7/03	5/7/03	
Start Time (24 hour basis)	08:47	11:08	12:43	
Stop Time (24 hour basis)	09:50	12:11	13:46	
Unit Operational Data				Averages
Steam Pressure (psig)	322	322	323	322.3
Steam Temperature (°F)	422	422	422	422
Boiler Load (lbs•m/hr)	112,000	126,000	101,000	114,500
Boiler Efficiency (%)	68	68	68	68
Steam Enthalpy (Btu/lb•m)	1203.5	1203.5	1203.5	1203.5
Heat Input (MMBtu/hr)	153.7	173.8	138.6	157.4
Unit Load (% of permitted capacity = 224 MMBtu/hr)	68.6%	77.6%	61.9%	69.4%
Stack Gas Sampling Data				
Box No.	E-1	E-2	E-3	-
Dry Gas Meter Factor	1.0157	1.0157	1.0157	1.0157
Atmospheric Pressure (" Hg, absolute)	29.94	29.92	29.88	29.91
Sample Volume at STP, dry basis (SCF)	35.374	36.677	36.643	36.232
Moisture (% volume)	14.17	13.89	13.25	13.77
O_2 (% volume, dry basis)	16.13	15.90	16.27	16.10
CO_2 (% volume, dry basis)	4.60	4.07	4.07	4.24
Stack Gas Molecular Weight, wet basis (lbs./lb-mole)	27.77	27.72	27.80	27.76
Average $\sqrt{\Delta P}$	0.435138	0.470915	0.474212	0.466755
Avg. Stack Temperature (°F)	355.6	357.7	358.2	357.1
Stack Gas Static Pressure (" H_2O)	-0.15	-0.16	-0.15	-0.15
Stack Velocity (ft/sec @ stack conditions)	32.578	33.585	33.801	33.255
Stack Flow, dry (SCFH)	1.79E+06	1.86E+06	1.88E+06	1.85E+06
Sample Run Time (minutes)	60	60	60	60
Nozzle Area (ft²)	0.0005321	0.0005321	0.0005321	0.0005321
% of Isokinetic Sampling	**100.7**	**102.6**	**101.3**	**102.2**
Particular Matter Weight Analysis (g)				
Filter Number	7	6	5	
Average Tare Weight	65.41000	67.10175	65.03265	65.84813
Average Final Weight	65.41340	67.10260	65.03330	65.84977
Filter Weight Gain	0.00340	0.00085	0.00065	0.0016
Filter Blank Number	4	4	4	
Average Tare Weight	65.84620	65.84620	65.84620	65.84620
Average Final Weight	65.84665	65.84665	65.84665	65.84665
Filter Blank Weight Gain	0.00045	0.00045	0.00045	0.00045
Nozzle (and loose PM) Rinse Beaker Number	5	6	7	
Volume (Acetone)	220	245	250	240
Avgerage Tare Weight	105.48030	106.54875	104.53670	105.52192
Average Final Weight	105.48580	106.55215	104.53940	105.52578
Front Half Weight Gain	0.00550	0.00340	0.00270	0.00387
Nozzle (and loose PM) Rinse Blank Beaker Number	9	9	9	
Volume (Acetone)	250	250	250	250
Avgerage Tare Weight	106.36835	106.36835	106.36835	106.36835
Average Final Weight	106.36835	106.36835	106.36835	106.36835
Acetone Blank Residue Concentration (mg/mg)	0.0000000	0.0000000	0.0000000	0.0000000
Particulate Matter Weight Gain				
Total Collected Blank Weight Correction (Acetone)	0.00000	0.00000	0.00000	0.00000
Total Collected Sample Weight (Filter + Nozzle + Loose PM)	0.00890	0.00425	0.00335	0.0055
Total Collected Particulate Matter, Blank Corrected (g)	0.00890	0.00425	0.00335	0.0055
Measured Emissions				
PM (grams/DSCF flue gas)	2.52E-04	1.16E-04	9.14E-05	1.53E-04
PM (grains/DSCF flue gas)	3.88E-03	1.79E-03	1.41E-03	2.36E-03
PM (lbs/hr)	**0.994**	**0.475**	**0.379**	**0.616**
PM (tons/yr)	**4.35**	**2.08**	**1.66**	**2.70**
PM (lbs/MMBtu, FDEP Permit Limit = 0.15)	**0.00647**	**0.00273**	**0.00274**	**0.00398**

Test Methods:

EPA Method 1 was used to select velocity and particulate matter (PM) traverse point locations in the waste wood boiler (WWB) stack, the regenerative thermal oxidizer (RTO) inlet, and the RTO stack outlet.

EPA Method 2 was used to determine stack gas differential pressure measurements for determination of flue gas velocity and flow rates at the RTO inlet, RTO outlet, and WWB stack.

EPA Method 3 was used to measure oxygen (O_2) and carbon dioxide (CO_2) concentrations in the WWB stack.

EPA Method 3a was used to measure oxygen (O_2) and carbon dioxide (CO_2) concentrations in the RTO inlet and RTO outlet.

EPA Method 4 was used to determine flue gas moisture content in the RTO inlet, RTO outlet and WWB stack.

EPA Method 5 was used for sampling and analysis of particulate matter (PM) concentrations from the RTO outlet and WWB stack.

EPA Method 9 was used to determine visible emissions (VE) measurements as opacity from the sanding system baghouse, RTO outlet, and WWB stack by a certified observer.

EPA Method 25a was used for determination of gaseous total hydrocarbon compounds (THC) as volatile organic compounds (VOC) at the RTO inlet and RTO outlet.

40 CFR 60 Appendix B Performance Specification 6 was used to determine the relative accuracy of the flow monitor associated with the RTO outlet.

Margarete M. Vest
PO Box 919
Palatka, FL 32178
Ph; 386-312-1191
Fax: 404-749-2750

facsimile transmittal

To:	Jonathan Holtom	**Fax:**	850-921-9533
From:	Margarete Vest	**Date:**	8/7/2003
Re:	Hawthorne Boiler Test Results AIRS ID 1070015	**Pages:**	5
CC:			

☐ Urgent x For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Following are the test results for the Georgia-Pacific Corporation Hawthorne boiler w/esp.

a few pages of manual documentation taken over the last few months.

Hawthorne Plywood Plant

Continuous Monitoring Log of ESP

Sched. Check Time	Secondary Kilovolts	Secondary Milliamps	Secondary Kilovolts	Secondary Milliamps	Secondary Kilovolts	Secondary Milliamps	Date: 7-1-02	
	Cell #1		Cell #2		Cell #3		Initial	Comments
12:15 AM	52	300	51	454	54	422	[illegible]	62.386
12:30 AM	49	310	50	452	54	400	[illegible]	59.390
12:45 AM	51	296	51	444	52	424	[illegible]	59.788
1:00 AM	53	270	51	446	53	420	[illegible]	59.316
1:15 AM	54	204	51	440	53	408	[illegible]	56.850
1:30 AM	53	220	52	498	54	420	[illegible]	
1:45 AM	49	248	52	444	54	408	[illegible]	
2:00 AM	51	260	51	460	53	400	[illegible]	
2:15 AM	53	302	50	460	54	432	JR	
2:30 AM	54	344	50	478	53	440	JR	
2:45 AM	51	300	50	470	53	430	JR	
3:00 AM	51	288	50	474	53	438	JR	
3:15 AM	54	314	50	456	54	426	JR	
3:30 AM	55	338	50	460	54	432	JR	
3:45 AM	53	302	50	468	54	436	JR	
4:00 AM	54	334	50	466	53	430	JR	
4:15 AM	52	316	50	476	53	448	[illegible]	
4:30 AM	54	256	49	478	52	444	[illegible]	
4:45 AM	53	266	50	480	53	442	[illegible]	
5:00 AM	52	306	49	478	54	430	[illegible]	
5:15 AM	52	318	49	460	52	420	[illegible]	
5:30 AM	51	260	50	470	53	420	[illegible]	
5:45 AM	52	304	51	456	52	410	[illegible]	
6:00 AM	52	310	52	460	54	400	[illegible]	
6:15 AM	55	304	50	450	53	426	RF	
6:30 AM	54	306	50	448	53	428	RF	
6:45 AM	54	298	50	446	53	424	RF	
7:00 AM	54	394						
7:15 AM	55							
7:30 AM	55							
7:45 AM	54	288	50	444	54	420	RS	
8:00 AM	52	266	50	448	54	422	RS	
8:15 AM	55	290	52	438	54	404	RF	
8:30 AM	50	218	50	472	53	450	RS	
8:45 AM	46	158	50	460	53	448	RS	
9:00 AM	52	244	50	464	53	436	RS	
9:15 AM	50	266	49	482	53	444	RS	
9:30 AM	50	268	50	450	54	430	RF	
9:45 AM	53	282	50	452	53	430	RF	
10:00 AM	51	240	50	454	53	428	RF	
10:15 AM	54	304	50	466	53	442	RF	
10:30 AM	52	280	50	470	53	444	RF	
10:45 AM	52	270	50	474	53	442	RF	
11:00 AM	49	224	49	464	53	438	RS	
11:15 AM	48	216	50	472	53	446	RS	
11:30 AM	47	194	50	456	53	432	RS	
11:45 AM	51	216	49	456	53	436	RS	
12:00 PM	51	206	51	432	53	428	RF	
12:15 PM	51	194	51	434	54	420	RF	
Max	55	394	62	478	56	450		76.506
Min	46	158	49	432	52	400		49.236 FW

Hawthorne Plywood Plant

Continuous Monitoring Log of ESP

Sched. Check Time	Secondary Kilovolts	Secondary Milliamps	Secondary Kilovolts	Secondary Milliamps	Secondary Kilovolts	Secondary Milliamps	Date: 4-22-03	
	Cell #1		Cell #2		Cell #3		Initial	Comments
12:15 AM	45	152	50	484	52	478	SA.	
12:30 AM	47	184	49	492	52	470	R.S.	
12:45 AM	51	234	50	470	53	464	R.S.	
1:00 AM	50	212	50	456	53	448	R.S.	
1:15 AM	48	150	51	444	53	442	SA	
1:30 AM	47	148	50	448	53	446	SA	
1:45 AM	51	208	50	450	53	442	SA	
2:00 AM	51	196	50	444	53	436	RS	
2:15 AM	50	208	50	442	53	438	RS	
2:30 AM	51	228	50	456	53	450	RS	
2:45 AM	49	168	50	456	53	453	SA	
3:00 AM	51	248	50	460	53	452	RS	
3:15 AM	49	212	50	474	52	454	RS	
3:30 AM	46	198	49	476	52	458	RS.	
3:45 AM	49	204	50	464	52	458	SA	
4:00 AM	50	198	51	446	54	434	SA	
4:15 AM	50	224	50	456	53	446	SA	
4:30 AM	50	208	51	448	53	447	SA	
4:45 AM	51	248	50	478	52	466	SA	
5:00 AM	52	242	50	450	53	442	SA	
5:15 AM	50	208	50	454	53	442	SA	
5:30 AM	48	188	50	450	53	440	SA	
5:45 AM	50	220	50	460	53	450	RS,	
6:00 AM	47	150	50	458	53	452	SA.	
6:15 AM	52	256	50	486	53	474	SS	
6:30 AM	51	282	50	466	53	460	SS	
6:45 AM	51	240	50	458	53	452	SS	
7:00 AM	48	248	50	456	53	450	JM	
7:15 AM	51	280	49	490	52	480	SS	
7:30 AM	49	232	50	474	53	466	JM	
7:45 AM	50	292	50	488	53	472	JM	
8:00 AM	50	298	50	482	53	468	JM	
8:15 AM	50	280	51	452	53	440	JM	
8:30 AM	53	260	51	438	54	434	JM	
8:45 AM	50	210	51	436	53	430	QC	
9:00 AM	50	236	50	444	53	440	JM	
9:15 AM	54	224	51	438	53	424	JM	
9:30 AM	51	284	51	440	53	428	JM	
9:45 AM	53	236	51	448	53	436	JM	
10:00 AM	50	236	51	442	54	430	JM	
10:15 AM	48	192	50	456	52	470	SS	
10:30 AM	54	272	51	434	54	418	SS	
10:45 AM	50	266	50	458	53	446	JM	
11:00 AM	50	304	50	466	53	436	JM	
11:15 AM	51	252	50	458	53	444	JM	
11:30 AM	55	300	51	442	54	438	QC	
Min	45	146	44	434	52	418		49.662
Max	54	298	51	492	54	478		66.996

Hawthorne Plywood Plant

Continuous Monitoring Log of ESP

Sched. Check Time	Secondary Kilovolts	Secondary Milliamps	Secondary Kilovolts	Secondary Milliamps	Secondary Kilovolts	Secondary Milliamps	Date: 6-1-03	
	Cell #1		Cell #2		Cell #3		Initial	Comments
12:15 AM	50	232	48	498	52	474	SS	
12:30 AM	50	270	48	516	52	472	JM	
12:45 AM	48	240	48	514	52	476	JM	
1:00 AM	55	288	49	482	53	448	SS	
1:15 AM	49	216	50	498	53	460	JM	
1:30 AM	55	270	50	476	53	454	JM	
1:45 AM	53	210	50	476	50	460	JM	
2:00 AM	49	107	50	486	53	460	JM	
2:15 AM	52	240	50	450	55	464	JM	
2:30 AM	51	962	50	458	53	432	JM	
2:45 AM	50	260	[illegible]	470	55	448	JM	
3:00 AM	52	224	50	486	52	454	JM	
3:15 AM	50	224	50	484	52	448	JM	
3:30 AM	50	236	49	486	52	450	JM	
3:45 AM	50	216	49	490	52	460	SS	
4:00 AM	50	224	49	484	53	452	SS	
4:15 AM	49	208	49	480	53	448	JM	
4:30 AM	50	220	49	470	53	448	JM	
4:45 AM	52	242	49	476	53	446	JM	
5:00 AM	50	246	49	494	52	458	SS	
5:15 AM	52	262	49	480	53	446	SS	
5:30 AM	50	276	49	504	53	466	JM	
5:45 AM	50	278	49	510	53	466	JM	
6:00 AM	53	276	50	490	54	454	SS	
6:15 AM	50	270	50	502	53	450	RF	
6:30 AM	51	282	49	500	53	446	RF	
6:45 AM	50	274	50	496	53	448	RF	
7:00 AM	50	266	49	494	54	450	RF	
7:15 AM	52	300	49	500	54	446	RF	
7:30 AM	53	306	49	502	54	442	RF	
7:45 AM	54	332	49	498	54	440	RF	
8:00 AM	50	204	49	492	52	468	RF	
8:15 AM	50	216	49	494	52	472	RF	
8:30 AM	50	226	49	496	52	476	RF	
8:45 AM	51	224	49	498	52	474	RF	
9:00 AM	47	166	49	496	52	474	RF	
9:15 AM	48	188	49	500	52	472	RF	
9:30 AM	47	176	49	496	52	474	RF	
9:45 AM	49	190	49	498	52	472	RF	
10:00 AM	51	228	49	500	52	466	RF	
10:15 AM	49	190	49	494	52	468	RF	
10:30 AM	43	184	49	496	53	464	RF	
10:45 AM	49	218	49	476	53	458	RF	
11:00 AM	45	170	49	478	52	466	RF	
11:15 AM	48	200	49	488	52	468	RF	
11:30 AM	50	210	49	486	53	454	RF	
11:45 AM	47	160	49	484	53	452	RF	
12:00 PM	47	162	49	482	53	454	RF	
12:15 PM	51	210	49	490	53	458	RF	
MIN	45	170	48	430	52	432	50,754	
MAX	52	306	50	516	54	476	67,416	

--ATTENTION MAIL ROOM--

PLEASE ROUTE THIS DOCUMENT TO:

Jonathan Holtom - DARM

Name of Individual/Office

5505

Mail Station Number

Department of Environmental Protection

Jeb Bush
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

David B. Struhs
Secretary

July 2, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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JUL 07 2003
BUREAU OF AIR REGULATION

Mr. Warren S. Flenniken, V.P. and General Manager
Jefferson Smurfit Corp. (U.S.), Mill Division
North 8th Street
Fernandina Beach, FL 32034

Nassau County –Air Permitting
Jefferson Smurfit Corporation (U.S.), Mill Division
Final Title V Permit No. 0890003-001-AV
Request for Additional Information Regarding Title V Permit Renewal Application

Dear Mr. Flenniken:

On June 6, 2003, the Department received your response to the Department's request for additional information dated March 5, 2003, for the referenced facility.

However, in order to continue processing your application, the Department will need the below additional information pursuant to Rule 62-213.420(1)(b)4., F.A.C., and Rule 62-4.070(1), F.A.C. Should your response to any of the following items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Given that the additional information submitted by Jefferson Smurfit on May 5, 2003, was sufficient so that the application for the package boiler was deemed complete, the Title V Renewal can now be issued with the package boiler included in the permit. Please note, however, that the permit must include a compliance plan in order to address the terms and conditions of the construction permit. As stated in your June 5, 2003, response, please provide the updated application pages for the package boiler based on JSC' May 5, 2003 additional information response.

2. In the JSC response to Item No. 5, reference was made to air construction permit No. AC45-2706. This construction permit is not in the NED files. Please provide a copy of this construction permit for the NED files.

3. In the JSC response to Item No. 5, it is stated that JSC has operated the No. 5 Smelt Dissolving Tank in accordance with the TRS requirements of Rule 62-296.404(5)(d), F.A.C. by maintaining a minimum weak wash flow rate of 75 gpm. Please provide the frequency at which the weak wash flow rate is determined?

4. In the JSC response to Item No. 7, it is stated that a construction permit was not issued for neither the 3.33 TPH bark ash rate nor the 10 TPH rate, that the 3.33 PTH rate first appeared in an operating permit issued in 1992. It was further stated that because the rate was not in a previous AC permit, it could be changed to 10 TPH through the Title V permitting process and therefore there was no need to revise the rate through an AC permit. Please note that the Title V Operating permit expires every 5 years, therefore the 10 TPH rate must be requested in each Title V Operation permit renewal, in order for it to be include in the Title V Operation Permit.

5. In the JSC response to Item No. 12, it is stated that the ASTM Method that is currently being used to determine the moisture in the coal for compliance with 60.45(b) for the No. 7 Power Boiler is D 2961. Please justify the use of this method given that it is not a method approved in Method 19 of 40 CFR Appendix A.

6. Pursuant to the application instructions, an emissions unit, which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from otherwise applicable unit-specific emissions or work practice standards (e.g., recordkeeping requirements for small storage tanks under 40 CFR 60, Subpart Kb), may be classified as an Unregulated Emissions Unit.

7. In accordance with Rule 62-297.310(7)(a)4., F.A.C., a formal compliance test shall be conducted during the federal fiscal year for each NESHAP pollutant, unless otherwise specified by rule, order, or permit. Prior to consideration of reduction in the formal compliance test frequency, JSC must obtain and submit enough data that would allow the Department to conclude there isn't a great deal of variability in the data. Therefore, the Department maintains that a formal compliance test shall be conducted for the Condensate Collection and treatment system during each federal fiscal year pursuant to the referenced F.A.C. Rule.

CAM Questions:

PM Emissions From The No. 5 Power Boiler (EU 006)

1. The use of opacity and ESP power as CAM indicators are acceptable monitoring parameters, especially when used concurrently. Please provide a table of test data that correlates the VE and ESP power readings to the tested PM emissions levels.

2. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

3. Has the COMS referenced in the CAM submittal been installed yet? If not, VE readings will need to be recorded four times per hour by a certified VE reader until the COMS is functional and calibrated.

PM Emissions From The No. 4 Recovery Boiler (EU 007)

4. Upon compliance with the MACT II requirements, this unit will only be exempt from the CAM requirements with regards to the standards established by the MACT II regulations. However, until the MACT requirements are established in an air construction permit that specifically negates the existing SIP limits found in Rule 62-296.404, F.A.C., this unit will continue to be subject to CAM for purposes of assuring compliance with the SIP limits. Using the MACT monitoring requirements is considered presumptively acceptable for CAM purposes for this unit and pollutant. Monitoring that demonstrates compliance with the MACT limits will assure compliance with the SIP limits. If the selected monitoring parameters happen to indicate an excursion or exceedance of the MACT standards, the monitoring parameters must still be sufficient to demonstrate compliance with the SIP limits.

5. The use of opacity as a CAM indicator is an acceptable monitoring parameter, but would be more reliable if it were coupled with monitoring of the ESP power, as with the No. 5 Power Boiler. Why has the monitoring of the ESP power not been proposed for this unit?

6. Please provide a table of test data that correlates the VE and ESP power readings to the tested PM emissions levels.

7. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

8. Has the COMS referenced in the CAM submittal been installed yet? If not, VE readings will need to be recorded four times per hour by a certified VE reader until the COMS is functional and calibrated.

PM Emissions From The No. 5 Recovery Boiler (EU 011)

9. Upon compliance with the MACT II requirements, this unit will only be exempt from the CAM requirements with regards to the standards established by the MACT II regulations. However, until the MACT requirements are established in an air construction permit that specifically negates the existing SIP limits found in Rule 62-296.404, F.A.C., this unit will continue to be subject to CAM for purposes of assuring compliance with the SIP limits. Using the MACT monitoring requirements is considered presumptively acceptable for CAM purposes for this unit and pollutant. Monitoring that demonstrates compliance with the MACT limits will assure compliance with the SIP limits. If the selected monitoring parameters happen to indicate an excursion or exceedance of the MACT standards, the monitoring parameters must still be sufficient to demonstrate compliance with the SIP limits.

10. The use of opacity as a CAM indicator is an acceptable monitoring parameter, but would be more reliable if it were coupled with monitoring of the ESP power, as with the No. 5 Power Boiler. Why has the monitoring of the ESP power not been proposed for this unit?

11. Please provide a table of test data that correlates the VE and ESP power readings to the tested PM emissions levels.

12. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

13. Has the COMS referenced in the CAM submittal been installed yet? If not, VE readings will need to be recorded four times per hour by a certified VE reader until the COMS is functional and calibrated.

PM Emissions From The No. 4 Smelt Dissolving Tank (EU 013)

14. Upon compliance with the MACT II requirements, this unit will only be exempt from the CAM requirements with regards to the standards established by the MACT II regulations. However, until the MACT requirements are established in an air construction permit that specifically negates the existing SIP limits found in Rule 62-296.404, F.A.C., this unit will continue to be subject to CAM for purposes of assuring compliance with the SIP limits. Using the MACT monitoring requirements is considered presumptively acceptable for CAM purposes for this unit and pollutant. Monitoring that demonstrates compliance with the MACT limits will assure compliance with the SIP limits. If the selected monitoring parameters happen to indicate an excursion or exceedance of the MACT standards, the monitoring parameters must still be sufficient to demonstrate compliance with the SIP limits.

15. The use of scrubber pressure drop and scrubbing liquid flow rate as CAM indicators are acceptable monitoring parameters. Please provide a table of test data that correlates the scrubber pressure drop and scrubbing liquid flow rate to the tested PM emissions levels.

16. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

17. Has the continuous monitoring system, that records the pressure drop across the scrubber and the scrubbing liquid flow rate, referenced in the CAM submittal been installed yet? If not, these readings will need to be recorded manually four times per hour until the continuous monitoring system is functional and calibrated.

TRS Emissions From The No. 4 Smelt Dissolving Tank (EU 013)

18. The use of the scrubber flow rate as a CAM indicator is an acceptable monitoring parameter, but would be more reliable if it were coupled with monitoring of the scrubber pressure drop, as proposed for PM emissions from this unit. Why has the monitoring of the scrubber pressure drop not been proposed for this pollutant?

19. Please provide a table of test data that correlates the scrubber flow rate and scrubber pressure drop to the tested PM emissions levels.

20. The proposed indicator range of a 12-hour average less than 68 gpm is not protective of the permit condition nor justified by any supporting documentation. Failure to meet this excursion level would actually be an exceedance of the permit condition, and possibly an exceedance of the emissions limit. A flow rate and averaging period that assures compliance with the permit condition must be established. A 3-hour average would be reasonable. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

PM Emissions From The No. 5 Smelt Dissolving Tank (EU 014)

21. Upon compliance with the MACT II requirements, this unit will only be exempt from the CAM requirements with regards to the standards established by the MACT II regulations. However, until the MACT requirements are established in an air construction permit that specifically negates the existing SIP limits found in Rule 62-296.404, F.A.C., this unit will continue to be subject to CAM for purposes of assuring compliance with the SIP limits. Using the MACT monitoring requirements is considered presumptively acceptable for CAM purposes for this unit and pollutant. Monitoring that demonstrates compliance with the MACT limits will assure compliance with the SIP limits. If the selected monitoring parameters happen to indicate an excursion or exceedance of the MACT standards, the monitoring parameters must still be sufficient to demonstrate compliance with the SIP limits.

22. The use of scrubber pressure drop and scrubbing liquid flow rate as CAM indicators are acceptable monitoring parameters. Please provide a table of test data that correlates the scrubber pressure drop and scrubbing liquid flow rate to the tested PM emissions levels.

23. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

24. Has the continuous monitoring system, that records the pressure drop across the scrubber and the scrubbing liquid flow rate, referenced in the CAM submittal been installed yet? If not, these readings will need to be recorded manually four times per hour until the continuous monitoring system is functional and calibrated.

TRS Emissions From The No. 5 Smelt Dissolving Tank (EU 014)

25. The use of the scrubber flow rate as a CAM indicator is an acceptable monitoring parameter, but would be more reliable if it were coupled with monitoring of the scrubber pressure drop, as proposed for PM emissions from this unit. Why has the monitoring of the scrubber pressure drop not been proposed for this pollutant?

26. Please provide a table of test data that correlates the scrubber flow rate and scrubber pressure drop to the tested PM emissions levels.

27. The proposed indicator range of a 12-hour average less than 75 gpm is not protective of the permit condition nor justified by any supporting documentation. Failure to meet this excursion level would actually be an exceedance of the permit condition, and possibly an exceedance of the emissions limit. A flow rate and averaging period that assures compliance with the permit condition must be established. A 3-hour average would be reasonable. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

PM Emissions From The No. 7 Power Boiler (EU 015)

28. The use of opacity and ESP power as CAM indicators are acceptable monitoring parameters, especially when used concurrently. Please provide a table of test data that correlates the VE and ESP power readings to the tested PM emissions levels.

29. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

30. Has the COMS referenced in the CAM submittal been installed yet? If not, VE readings will need to be recorded four times per hour by a certified VE reader until the COMS is functional and calibrated.

PM Emissions From The No. 4 Lime Kiln

31. Upon compliance with the MACT II requirements, this unit will only be exempt from the CAM requirements with regards to the standards established by the MACT II regulations. However, until the MACT requirements are established in an air construction permit that specifically negates the existing SIP limits found in Rule 62-296.404, F.A.C., this unit will continue to be subject to CAM for purposes of assuring compliance with the SIP limits. Using the MACT monitoring requirements is considered presumptively acceptable for CAM purposes for this unit and pollutant. Monitoring that demonstrates compliance with the MACT limits will assure compliance with the SIP limits. If the selected monitoring parameters happen to indicate an excursion or exceedance of the MACT standards, the monitoring parameters must still be sufficient to demonstrate compliance with the SIP limits.

32. The use of opacity as a CAM indicator is an acceptable monitoring parameter, but would be more reliable if it were coupled with monitoring of the ESP power, as with the No. 5 Power Boiler. Why has the monitoring of the ESP power not been proposed for this unit?

33. Please provide a table of test data that correlates the VE and ESP power readings to the tested PM emissions levels.

34. Please identify the selected indicator ranges that are justified by the submitted data. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent exceedences.

35. Has the COMS referenced in the CAM submittal been installed yet? If not, VE readings will need to be recorded four times per hour by a certified VE reader until the COMS is functional and calibrated.

TRS Emissions From The Pulping System (EU 033)

36. This emissions unit is not subject to the CAM requirements because it does not have specific emission limiting standards imposed. Regulation of this unit is through work practice standards and pollution prevention techniques.

DRAFT Title V Permit Revision No. 0890003-005-AV:

On September 26, 2002, JSC and NED met to discuss the JSC comments (received on August 14, 2002), submitted in response to the issuance of DRAFT Title V Permit Revision, No. 0890003-005-AV. Because NED is currently processing the Title V Renewal, it is NED's intent to withdraw the referenced DRAFT Title V Permit Revision at the time of issuance of the DRAFT Title V Operation Permit Renewal. However, there were some questions raised at the September meeting that required formal response. Those responses appear below:

Why are regulations made a part of the permit? How do revisions to the regulations get incorporated? Other regulations applicable to the facility are not incorporated into the permit, why are these?

Response: The Department attempts to include the appropriate/applicable requirements of the affected federal NSPS or NESHAP regulations as Conditions of the permit. However, if the Department understands that a facility is subject to a federal regulation, but does not know the specific requirements applicable to the facility, the complete regulation is generally made as an attachment to the permit. Furthermore, the General Provisions of an applicable regulation may also be attached in its entirety.

NED will attempt to incorporate the appropriate/applicable requirements of the regulations as Conditions of the Permit and remove them as attachments to the permit.

Pursuant to Rule 62-213.430(4), F.A.C., a Title V Permit shall be reopened and revised via a Title V Permit Revision should additional applicable requirements under 62-4.080, F.A.C. or the Clean Air Act become applicable and there is 3 or more years remaining in the term of the permit. The reopening of the permit must be completed no later than 18 months after promulgation of the applicable requirement.

Comment #2:

Only specific portions of Subpart RR are referenced in Subpart S. This certainly does not warrant incorporating the entire regulation.

Response: NED is in agreement with this statement. Therefore as a result of this comment, the applicable requirements of 40 CFR Part 63, Subpart RR will be incorporated as a Subsection of the Title V Renewal.

Comment #3:

40 CFR Part 63, Appendix C is not applicable, so this reference should be deleted. The applicable requirement is the approved alternative compliance demonstration for §63.446, which is referred to as the Fernandina Beach Condensate Compliance Plan, as amended March 5, 2001.

Response: NED is in agreement with this statement. Therefore as a result of this comment, 40 CFR Part 63, Appendix C will be removed from the "Referenced attachments made a part of the permit" and the Fernandina Beach Condensate Compliance Plan, as amended March 5, 2001 will be added.

Comment #4

The April 5, 2002 revisions to the 40 CFR 63 General Provisions [63.6(e)(3)(ix)] eliminated the requirement that the SSM Plan be incorporated by reference into a facility's Title V permit; instead the Title V permit should merely require an SSM Plan so the Plan can be revised without a Title V Permit Revision. Therefore, the SSM Plan should not be made a part of the Title V Permit.

Response: Based on guidance from DARM, NED will remove the SSM Plan from the "Referenced attachments made a part of the permit", but intends to include a facility-wide condition to address the SSM Plan.

Comment #5

We request that the "Order on Request for Alternate Procedures and Requirements, File No. 01-H-AP, dated 02/05/02" not be made a part of the permit at this time. This Order applies to an opacity monitor installation for Subpart MM (MACT II) compliance that is not yet installed. Including this order in the permit at this time may complicate matters if changes are needed.

Response: Due to the fact that this opacity monitor installation has not occurred yet, NED will remove this attachment from the permit.

Comment #6

As indicated in Item 3 above, the applicable requirement is the Fernandina Beach Condensate Compliance plan, as amended March 5, 2001. The Mill's proposed Condensate Compliance Plan was approved with some exceptions noted in the "USEPA Region IV Condensates Alternative Compliance Plan Approval Letter dated 11/01/00". The exceptions were addressed in the March 5, 2001 amendment to the Fernandina Mill's Condensate Compliance Plan and by supporting data in the Initial Condensate Collection and Treatment Compliance Test Report, also dated March 5, 2001. The permit should reference the Condensate Compliance Plan, as amended March 5, 2001, as the Fernandina Mill's method of demonstrating compliance with § 63.446. If the Region IV approval letter is referenced, the permit should also reference the Mill's Condensate Compliance Plan, the March 5, 2001 amendment, and the March 5, 2001 Initial Condensate Collection and treatment Compliance Test Report.

Response: NED agrees with the comments.

Comment #7

The statement included with EU ID 028- Chemical Recovery Area that is "will become regulated on March 13, 2003 due to MACT II" is not true. The Recovery Boilers, Smelt Dissolving Tanks, and Lime Kiln are subject to MACT II. The miscellaneous sources covered by EU ID 028 are not.

Response: NED will remove this statement from the list of Unregulated Emission Units table.

Comment #8

EU ID 033, Pulping System MACT I – The foul condensate sources and collection system regulated by MACT I and listed in Section III. K, should be added to the list in Section I.B. Also, EU ID 027, Pulping Area General, should be added to the unregulated EUs listed in Section I.B.

Response: Emission Unit ID 033 shall be added to the list of regulated emissions units in Section I.B.

Comment #9

Section II, Condition 2- Why has "Not federally enforceable" been removed from this condition?

Response: The General Pollutant Emission Limiting Standards- Objectionable Odor Prohibited facility-wide condition should only be flagged as "Not federally enforceable" if Rule 62-296.320(2), F.A.C. or language based on this rule has not appeared as a condition in a previously issued air construction permit. Because an air construction permit is a federally enforceable permit, and the language appeared in previous air construction permit Nos. AC45-141877, AC45-141873, AC45-141872, AC45-141871, AC45-141875, and AC45-141874 as conditions of those permits, the "Not federally enforceable" statement has been removed from the condition.

Comment #10

Section II, Condition 3- There is a general VE exception for pulp and paper EUs equipped with wet scrubbers, Rule 62-296.404. This rule should also be stated here since it is a facility-wide rule for pulp mills.

Response: NED will add a separate facility-wide condition to address this rule.

Comment #11

Section II, Condition 10- This condition as worded could be read to require a PE certification for all submittals, including reports and compliance statements. Please reword. We suggest deleting the initial phrase: "In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C." If FDEP deems it necessary, the following may be added at the end of Condition 10: "In addition, applications shall have the professional engineering certification required by Rule 62-4.050(3), F.A.C."

Response: The language used in Section II, Condition 10 is boilerplate language provided by DARM for the Title V Permit. NED forwarded your comments to DARM for consideration and was informed that the condition language is consistent with Rule 62-213.420(4), F.A.C. Therefore, the condition language shall remain.

Comment #12

Section II, the heading prior to Condition 13 should read "Additional 40 CFR 63 Subpart S Requirements."

Response: NED is in agreement with these comments.

Comment #13

Section II, Condition 13.a, b – The citation for paragraph (a) should be 63.455, not 63.445. In paragraph (b) the reference should be to (ii) through (v), not (ii) through (iv).

Response: The corrections to these citations shall be made.

Comment #14

Section II, Condition 13.c – The citations are incorrect. 40 CFR 63.7 references performance testing and 62-297.310(8)(b) references test reports, not permit revisions.

Response: The referenced citations were an attempt to show the basis of the Nov 30, 2006, Title V Permit Revision submittal deadline, i.e. conduct performance testing no later than 180 days from the compliance deadline pursuant to 40 CFR 63.7(a)(2) and the submittal of the test report within 45 days after the last sampling run of each test is completed pursuant to Rule 62-297.310(8)(b), F.A.C.

Comment #15

Section II, Condition 14 – The periodic monitoring conditions specified are unacceptable as written.

Response: As discussed in the September 26, 2002, meeting held at NED, the referenced facility-wide language was crafted by EPA Region IV as the resolution of a Title V Permit Objection from EPA Region IV for another paper mill within the NED. As a result, NED has included this language in all of the Title V Operation Permit Revisions it has issued for paper mills. Because this is EPA crafted language, NED forwarded your comments onto Ms. Gracy Danios at Region IV for her review. Ms. Danios has responded verbally that Region IV is open to negotiation concerning the referenced permit language. It has been suggested that Jefferson Smurfit submit a proposal directly to Ms. Danios at Region IV for consideration.

The Department has an understanding with EPA Region IV that anytime a Title V Operation permit is reopened, all applicable rules and standards not addressed by the existing permit will be addressed during the reopening process, i.e. in this case Periodic Monitoring and the Title V Permit Revision.

Comment #16

Section III, All Subsections/emission Units: "Permitted Capacity." Consistent with the "permitting note", the title of this item should be changed to "Rated Capacity" since this is not a permit limit. Also, the identified "permitted capacity" of the emission units has been changed from the prior permit to include the phrase "as a 24-hr average and shall not be exceeded by more than 10% for any 1-hr average". We believe there is not basis in this permit revision for inserting the language about 1-hour averages. Also, the language should be changed to make clear that a rolling 24-hr average is not intended. We recommend rewording this phrase to say"...as a calendar day (24-hr) average". In addition, the "permitting note" should be changed to read: *"The rated capacity has been placed in each permit..."*

Response: The term, "Permitted Capacity" is consistent with the boilerplate language provided by DARM in the format for a Title V Operation Permit. The " shall not be exceeded by more than 10% for any 1-hr average" was added in response to JSC's request for the emission unit operation rates be based on a 24-hr basis. As stated in the September 26 meeting, NED shall forward your comments concerning the "24-hr average" to DARM for review and comment.

Comment #17

Some Emission Units do not have a "Reporting Requirements" paragraph. See No. 7 Power Boiler, No. 4 Lime Kiln, Tall oil Plant, and C-line Washer System. The reporting requirements should be added to insure the proper reports are submitted.

Response: NED will add a "Reporting Requirement" paragraph to the emission units as requested.

Comment #18

The *permitting* note under "*emission Limitations* and *Standards*" should be reworded as some averaging times are not the same as the test method, e.g. 12-hr TRS. Recommend the following: "The averaging time for these conditions is based on the run time of the specified reference test method, unless otherwise specified."

Response: Based on the Title V Operation Permit Format provided by DARM, the permitting note will be changed as follows:

{Permitting Note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

Comment #19

JSC would like to clarify when annual compliance testing is required for each source. This has been reviewed with Mr. Mort Benjamin of your office and we are currently conducting all source tests at one time, not based on the frequency base dates.

Response: Based on the Title V Operation Permit Format provided by DARM, the frequency base date for testing purposes will be removed from the conditions of the Title V Operation permit itself. The frequency base date information is stated in Table 2-1, Summary of Compliance Requirements, which is provided to the Permittee for Informational Purposes only will remain. It is suggested that the applicant review these dates stated in this Table and provide updated information as needed.

Comment #20

Stack tests required to be "performed on request" should cite 62-297.310(7)(b) to describe when special compliance tests may be required. For example, see conditions F.12. and F.13.

Response: NED is in agreement with this comment and will revise Conditions F. 12., F.13., and F.14. of the Title V Permit Revision as requested.

Comment #211

The description for EU ID No. 006 should be rewritten. As written this only recognizes the new sources from Construction Permit No. 0890003-003-AC and does not include the existing LVHC sources also subject to the MACT I requirements. Recommend the following:
"No. 5 Power Boiler fired with carbonaceous fuel and No. 6 fuel oil in any combination and with an electrostatic precipitator to control particulate matter. Low volume, high concentration (LVHC) Noncondensible gases (NCG) from the batch digester system, continuous digester system, turpentine recovery system, evaporator systems, and foul condensate collection tank are collected and burned in the No. 4 Lime Kiln with the No. 5 Power Boiler as backup for compliance with 40 CFR 63, Subpart S."

Response: NED is in agreement with this comment and will revise the description for EU ID NO. 006 based on these comments.

Comment #22:

Condition A.5 Sulfur Dioxide, should begin with "When burning No. 6 Fuel Oil..." because when burning NCGs the limits specified may be exceeded per Condition A.10. The TPY limit should be 6,618.62 TPY.

Response: NED is in agreement that the TPY SO2 limit should be 6,618.62 TPY. As agreed in the September 26, 2002 meeting, a note will be added in Condition No. A.5. that makes reference to Condition A.10.

Comment #23:

Conditions A.6 and A.11 Total Reduced Sulfur Emissions should include a citation to Construction Permit No. 0890003-003-AC.

Response: The construction permit citation will be added to these conditions.

Comment #24:

Condition A.10. Sulfur Dioxide

- **a. Last sentence of first paragraph, correct "For purposed..." to "For purposes..."**
- **b. In the calculations, correct "lb/SO2/gal" to "lb SO2/gal".**
- **c. In the calculations, add "where S = Sulfur content of oil in percent".**
- **d. Please add the following to the last sentence for cases where SO2 emissions exceed 1,511.1 lb/hr on the last few days of the year and the offsetting cannot be completed before the end of the year: "The offsetting shall be completed no later than the end of the calendar year during which the excess emissions were emitted, *or with the next scheduled delivery, whichever is later.*"**

Response: NED will make the requested changes to items a – c. With concurrence from DARM, NED will make the requested language change to item d.

Comment #25:

Conditions B.2. and C.2. – Please reword the Method of operation for clarity. Note that "on-spec used oil" could be deleted since it is referenced in Footnote 2.

Response: Conditions will be revised.

Comment #26:

Conditions D.5. and E.5. should include the wet scrubber language specified in the Rule Citation.

Response: Conditions D.5 and E.5. will be revised.

Comment #27:

Condition F.2. – The Method of Operation should be reworded for clarity: "This emissions unit is fired primarily with coal and my fire Nos. 2 and 6 Fuel Oil, which may contain on-spec used oil, when coal is not available, and during startups, shutdowns, and malfunctions, provided that the amount of oil burned annually shall not exceed 10% of the annual capacity factor". Also need to add a footnote to the table for on-spec used oil to be consistent with other units.

Response: Based on this comment, the condition will be revised.

Comment #28:

Conditions F.9. – Delete the less than sign (<) form "shall not exceed <20% opacity."

Response: 40 CFR 60.252(c) states that an owner or operator subject to the provisions of Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

Therefore the visible emissions cannot equal 20% opacity.

Comment #29:

The original PSD permit should be cited throughout this subsection, as appropriate.

Response: NED will cite the PSD permit as requested in Subsection F.

Comment #30:

No. 4 Lime Kiln -The description of the emission unit should be reworded because he items list in the first bullet point are also required to be controlled for Subpart S compliance as noted in the second bullet point. Recommend the following for the second bullet point: *"Low volume, high concentration (LVHC) Noncondensible gases (NCG) from the batch digester system, continuous digester system, turpentine recovery system, evaporator systems, and foul condensate collection tank are collected and burned in the No. 4 Lime Kiln with the No. 5 Power Boiler as the back up for compliance with 40 CFR 63, Subpart S."*

Response: NED is in agreement with this comment. The description for the No. 4 Lime Kiln will be changed as requested.

Comment #31:

Condition H.1. – To be consisted with the table in H.1., footnotes 2 and 3 should like "TPD ADUP".

Response: NED is in agreement with this comment. Condition H.1. will be changed as requested.

Comment #32:

Condition H.2. – Correct typo in the note :"heat input".

Response: NED will correct the typo.

Comment #33:

Conditions H.4. and H.5. – Correct citation error: 62-204.800(7)(b)35, not 34.

Response: NED will correct the citation error..

Comment #34:

Condition J.2. – The phrase "apply to each amount" is unclear. Please reword the On-spec used oil condition for clarity as follows: "On-specification used oil, whether generated on or off-site, may be fired as follows: (1) At any time provided the maximum concentration of PCBs is less than 2 ppm. The analysis and recordkeeping requirements specified in Condition J.3. shall apply. (2) Only during normal operating temperatures (not startup or shutdown) if the maximum concentration of PCBs is greater than, or equal to 2ppm, but less than 50 ppm."

Response: Based on these comments NED will revise the language.

Comment #35:

Condition K.2. – The equipment listed contains several nomenclature errors. Note that the NCG Collection Header, No. 5 Power Boiler, and Lime Kiln lines are not equipment systems required to be collected, but instead are part of the closed vent system used to control NCGs from other equipment; they should not be included in the list. Recommend the following list:

- **Kamyr Blow Tank**
- **Kamyr Vent Gas Condenser**
- **Kamyr Secondary Condenser and NCG Cooler**
- **Batch Turpentine Secondary Condenser**
- **Batch BHA Secondary Condenser and NCG Cooler**
- **No. 5 Evaporator Hotwell**
- **No. 6 Evaporator Hotwell**
- **Turpentine Decanter and storage Tank**
- **UNOX Condensate Feed Tank**

Response: NED will change Condition K.2. based on this comment.

Comment #36:

Condition K.2. – The following phrase in footnote 1 should be deleted:"...and any liquid streams associated with the turpentine recovery process such as turpentine decanter underflow". Liquid streams are not collected in the LVHC system.

Response: NED will change the footnote 1 in Condition K.2. based on this comment.

Comment #37:

Condition K.4. – Please make the following corrections in the bulleted list:

- **No. 5 Evaporator Hotwell**
- **No. 6 Evaporator Hotwell**
- **No. 5 Evaporator Fifth Effect Level Pot**

Response: NED will make the corrections to Condition K.4. based on this comment.

Comment #38:

Condition K.6. – the last regulation paragraph cited should be (b)(5)(iii), not (B)(5)(iii).

Response: Based on this comment the citation will be corrected.

Comment #39:

Condition K.9. – Because JSC has a site specific Condensate Compliance Plan, Condition K.31 [63.457(i)] does not apply.

Response: NED is in agreement with this comment. Condition K.9. will be changed.

Comment #40:

Condition K.10. – This condition is not applicable and should be deleted from the permit. 63.446(f) has an exception for condensate treated according to paragraph 63.446(e)(2), i.e. biological treatment.

Response: NED will remove this condition from the permit.

Comment #41:

Condition K.11. – Please delete the phrase "for Kraft pulping condensates" from K.11(a). It is not in the regulation and is confusing.

Response: NED will remove this phrase from Condition K.11.(a) based on this comment.

Comment #42:

Condition K.13.- Delete the last sentence beginning, "The surrogate parameters..." In accordance with JSC's Condensate Compliance Plan these surrogate parameters may be expanded after compliance testing, therefore they cannot be specified in the permit.

Response: The Department will incorporate language from JSC's Condensate Compliance Plan as amended March 5, 2001.

Comment #43:

Condition K.14. – Because JSC has a site specific Condensate Compliance Plan, this condition is not applicable and should be deleted. 63.453(j) applies to open biological treatment systems.

Response: NED is in agreement that the referenced regulation applies to open biological treatment systems and will remove this condition from the permit.

Comment #44:

Condition K.15. - Because JSC has a site specific Condensate Compliance Plan, this condition is not applicable and should be deleted. 63.453(j) applies to open biological treatment systems.

Response: NED is in agreement and will remove this condition from the permit.

Comment #45:

Condition K.16. – EPA issued a regulatory interpretation in January 10, 2002 Federal Register that allowed for closed vent system inspections once a month rather than every 30 days. Please reword item (1) as follows: "...shall be performed once during the calendar month, as long as at least 21 days elapse between in sections, to ensure the..."

Response: The January 10, 2002 Federal Register is a notice to sources that International Paper located in Terre Haute, Indiana received an EPA approval to perform their closed vent system inspections required by 40 C.F.R. 63.454(k) once per calendar month as long as there is a 21-day elapsed time period between inspections. This is not an across-the-board approval for all paper mills subject to this requirement nor is it a change in the regulation requirements, i.e. a regulation amendment.

JSC will need to obtain a site-specific approval from EPA Region IV in order for the Department to be able to include such language in a permit condition. JSC may submit a request for an alternative monitoring approval to Mr. Lee Page, USEPA Region IV, 61 Forsyth Street S.W., Atlanta, Georgia 30303-8960

Comment #46:

Condition K.16 – Item (3) should reference K.26., not L.26.

Response: NED is in agreement with this comment and will change the reference in Condition K.16. as requested.

Comment #47:

Condition K.21. – correct the following reference: "...in paragraph (a) in §63.454 ~~of this section~~ for any...".

Response: Based on this comment, NED will change Condition K.21.

Comment #48:

Condition K.22 – Correct the following reference: "...in paragraph (a) of §63.455 ~~of this section~~ for any..."

Response: Based on this comment, NED will change Condition K.21.

Comment #49:

Condition K.23. – Because JSC has a site specific Condensate Compliance Plan this condition is not applicable and should be deleted. The expansion of monitoring parameters is addressed in the EPA approved plan.

Response: This condition will be modified based on the Condensate Compliance Plan.

Comment #50:

Condition K.24. – Because JSC has a site specific Condensate Compliance Plan this condition is not applicable and should be deleted. Performance testing is addressed in the EPA approved plan.

Response: State Rule 62-297.310(7)(a)4.c., F.A.C., requires that a compliance test be conducted during each federal fiscal year (October 1 – September 30) for each NESHAP pollutant, if there is an applicable emission standard.

The Department has not deleted this condition from the permit, but has made the basis of the condition only the referenced rule above for clarification purposes.

Comment #51:

Condition K.25. - Because JSC has a site specific Condensate Compliance Plan this condition is not applicable and should be deleted, or, at most, only referenced and listed as modified by the Condensate Compliance Plan.

Response: The language in this condition will be modified.

Comments #52-55:

Response: The language in these conditions will be modified to reflect the Condensate Compliance Plan.

Comment #56:

Condition K.34. – Paragraph (1) is not applicable because JSC is complying with the lb/ton option, not the 65 percent option. Paragraph (2)(i) is not applicable because the procedures in 63.457(c) and (j) are not applicable. Requirements not applicable to JSC should not be included in the permit.

Response: Based on this comment, NED will modify the condition.

Comment #57:

Condition K.35. – The referenced Condition K.14. is not applicable so Condition 35 should be deleted.

Response: NED is in agreement with this comment and will remove Condition K.35. from the permit.

Comment #58:

Add EU IS 027, Pulping Area General to the Appendix U-1.

Response: As stated in the response to Comment #8, Emission Unit ID 027, Pulping Area General, is an Inactive Emission Unit, therefore it will not be listed in the Unregulated Emission Unit table in Section I.B.

Comment #59:

The statement included with EU ID 028- Chemical Recovery Area that is "will become regulated on March 13, 2003 due to MACT II" is not true. The Recovery Boilers, Smelt Dissolving Tanks, and Lime Kiln are subject to MACT II. The miscellaneous sources covered by EU ID 028 are not. Please correct Appendix U-1.

Response: NED will remove this statement from Appendix U-1.

Responsible Official (R.O.) Certification Statement:

Rule 62-213.420, F.A.C. requires that a responsible official must certify all Title V permit applications. Due to the nature of the information requested above, the responsible official should certify your response. Please complete and submit a new R.O. certification statement page from the Application for Air Permit – Title V Source, DEP Form No. 62-210.900(1), effective February 11, 1999 (enclosed).

Professional Engineer (P.E.) Certification Statement:

Rule 62-4.050(3), F.A.C. requires that a professional engineer registered in the State of Florida certify all applications for a Department permit. This requirement also applies to responses to Department requests for additional information of an engineering nature. As a result, a professional engineer registered in the State of Florida should certify your response. Please complete and submit a new P.E. certification statement page from the Application for Air Permit – Title V Source, DEP Form No. 62-210.900(1), effective February 11, 1999 (enclosed).

The Department must receive a response from you within 90 (ninety) days of receipt of this letter, unless you (the applicant) request additional time under Rule 62-213.420(1)(b)6., F.A.C.

If you should have any questions, please call Rita Felton-Smith at (904) 807-3300, extension 3237.

Sincerely,

Christopher L. Kirts, P.E.
District Air Program Administrator

CLK:RFS

Enclosure: (x) Responsible Official Certification Statement
(x) Professional Engineer Certification Statement

Copy to:
David A. Buff, P.E.
Bill Crews, Jefferson Smurfit Corporation
Jonathan Holtom, DARM

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

2. Owner/Authorized Representative or Responsible Official Mailing Address:
Organization/Firm:
Street Address:
City: State: Zip Code:

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
Telephone: ( ) - Fax: ( ) -

4. Owner/Authorized Representative or Responsible Official Statement:

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

_____ _____

Signature Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name:
Registration Number:

2. Professional Engineer Mailing Address:
Organization/Firm:
Street Address:
City: State: Zip Code:

3. Professional Engineer Telephone Numbers:
Telephone: ( ) - Fax: ( ) -

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 [ ], 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 _____ Date _____

(seal)

* Attach any exception to certification statement.

Retracted 12/4/84 via phone call with Cynthia Sawyer per BAC

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

NOT VALID

October 22, 1984

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Tom V. Brown
Vice President and Resident Manager
Container Corporation of America
North Eighth Street
Fernandina Beach, Florida 32034

Dear Mr. Brown:

Re: Amendment to the Construction Permit: AC 45-35532

The Department is in receipt of Ms. Cynthia L. Sawyer's letter dated August 21, 1984, which contained information to support a revision of the original BACT determined NO_x emission limit contained in the above referenced construction permit. Since an amendment revising the original BACT determined NO_x emission limit was signed October 12, 1984, the Department shall make the following changes and additions:

Specific Conditions:

No: 9

From: Maximum emission limits are:

Pollutant	lb/MMBTU	lb/hr
Particulate	0.1	102
SO_2	1.2	1,225
NO_x	0.6	612
Opacity	20% except 27% for one 6 minute period per hour.	

To: Maximum emission limits are:

Pollutant	lb/MMBTU	lb/hr
Particulate	0.1	102
SO_2	1.2	1,225
NO_x	0.7	700
Opacity	20% except 27% for one 6 minute period per hour.	

NOT DATED

Best Available Control Technology (BACT) Determination
Container Corporation of America
Nassau County
Amendment

This amended BACT determination revises only the NO_x emission limit contained in the BACT determination dated December 30, 1980.

The affected source is a 1000 million Btu per hour heat input coal/wood waste fired steam generator (power boiler No. 7) installed at the applicant's plant site located on the inland side of Amelia Island.

BACT Determination Requested by the Applicant:

Pollutant	Emission Limit
Nitrogen Oxides	0.7 lb/million Btu heat input

Date of Receipt of a Complete BACT Application:

December 12, 1980

Date of Publication in the Florida Administrative Weekly:

December 19, 1980

Review Group Members:

The revised determination was based upon comments received from the New Source Review Section and the Northeast District.

BACT Determination by DER:

Pollutants	Emission Limit
Nitrogen Oxides (NO_x)	0.7 lb/million Btu heat input based on the gross calorific value of the fuel combusted.

Compliance with the nitrogen oxide emission limitation will be in accordance with the applicable test methods and procedures as set forth in Subsection 60.46, New Source Performance Standards (NSPS), Subpart D.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

NORTHEAST DISTRICT

October 22, 1984

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Tom V. Brown
Vice President and Resident Manager
Container Corporation of America
North Eighth Street
Fernandina Beach, Florida 32034

12/5/84 Per BM this was voided 12/4. JL

Dear Mr. Brown:

Re: Amendment to the Construction Permit: AC 45-35532

The Department is in receipt of Ms. Cynthia L. Sawyer's letter dated August 21, 1984, which contained information to support a revision of the original BACT determined NO_x emission limit contained in the above referenced construction permit. Since an amendment revising the original BACT determined NO_x emission limit was signed October 12, 1984, the Department shall make the following changes and additions:

Specific Conditions:

No: 9

From: Maximum emission limits are:

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NO_x	0.6	612
Opacity	20% except 27% for one 6 minute period per hour.	

To: Maximum emission limits are:

Pollutant	lb/MMBTU	lb/hr
Particulate	0.1	102
SO_2	1.2	1,225
NO_x	0.7	700
Opacity	20% except 27% for one 6 minute period per hour.	

No. 13: (new Specific Condition)

Permitted fuels shall be in accordance with 40 CFR 60.44(a)(3).

Attachments to be incorporated:

4. Cynthia L. Sawyer's letter dated August 21, 1984.
5. John C. Brown's memo dated August 27, 1984.
6. Cynthia L. Sawyer's letter dated September 13, 1984.
7. John C. Brown's letter dated September 14, 1984.
8. Amended BACT Determination dated October 12, 1984.

This letter must be attached to your construction permit, No. AC 45-35532, and shall become a part of that permit.

Sincerely,

Victoria J. Tschinkel

Victoria J. Tschinkel
Secretary

VJT/ks

cc: James T. Wilburn
Doug Dutton
John C. Brown
Cynthia L. Sawyer
Nancy Wright

enclosures

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207
(904) 396-6959

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

G. DOUG DUTTON
DISTRICT MANAGER

December 11, 1984

Mr. Paul J. Magnell
Vice President and Resident Manager
Container Corporation of America
North Eighth Street
Fernandina Beach, Florida 32034

file

Dear Mr. Magnell:

Nassau County - AP
Container Corporation of America
No. 7 Power Boiler

Attached is Permit No. A045-71885. Should you object to the issuance of this permit or the specific conditions of the permit, you have a right to petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes.

The petition must be filed within fourteen (14) days from receipt of this letter. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code, (copies attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301. Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department.

In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel.

If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

Sincerely,

Frank Watkins, Jr., P.E.
District Manager

FW:vk

cc: Mr. Roland L. Allen, Jr.. P. E.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ORTHEAST DISTRICT
3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
G. DOUG DUTTON
DISTRICT MANAGER

PERMITTEE:

Container Corporation of America
North Eighth Street
Fernandina Beach, FL 32034

I.D. Number:	3145000315
Permit/Certification Number:	AO45-71885
Date of Issue:	December 11, 1984
Expiration Date:	December 11, 1989
County:	Nassau
Latitude/Longitude:	30°40'53"N; 81°27'26"W
~~Section/Township/Range:~~	
Project:	No. 7 Power Boiler
UTM:	E-456.2; N-3394.2

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

For the operation of No. 7 Power Boiler, fired on coal, with a maximum heat input rate of 1021 MMBTU/hr and steam generation rate of 825,000 lbs/hr at 825°F and 850 psig. Particulate emissions are controlled by an electrostatic precipitator.

Located at N. 8th St., Fernandina Beach, Nassau County, FL

In accordance with:

1. Application for a Construction Permit dated 10-1-80 and attachments
2. Certificate of Completion of Construction form dated 6-16-83
3. New Sources Performance Standards Retest Report dated 6-27-84
4. Additional information received 9-26-83, 7-2-84 and 10-8-84.

ITTEE:

Container Corporation of America

I.D. Number:
Permit/Certification Number: AO45-71885
Date of Issue: December 11, 1984
Expiration Date: December 11, 1989

AL CONDITIONS:

The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

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

The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

(X) Determination of Best Available Control Technology (BACT)
(X) Determination of Prevention of Significant Deterioration (PSD)
( ) Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
( ) Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

c. Records of monitoring information shall include:

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

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

PERMITTEE:
Container Corporation of America

Permit No.: AO45-71885
Date of Issue: December 11, 198
Expiration Date: December 11, 1989

SPECIFIC CONDITIONS:

1. Testing of emissions must be accomplished at an input rate of at least 90% of 1021 MMBTU per hour.

2. The permitted maximum allowable emission rate for each pollutant is as follows:

Pollutant	Regulation	Emission Rate lbs/hr	Emission Rate TPY
From power boiler stack:			
PM	17-2.660,FAC; CFR 60.42	102	~~428~~ 447
SO_2	17-2.660,FAC; CFR 60.43	1225	~~5145~~ 5366
NO_x	EPA/DER agreement; CFR 52.21(j)	612	~~2570~~ 2681
CO	EPA/DER agreement; CFR 52.21(j)	93.6 ~~98~~	410
VE	17-2.660,FAC; CFR 60.42	20% opacity except 27% for one 6 mins. per hour	
From ash handling facility:			
PM	EPA/DER agreement; CFR 52.21(j)	0.5	----
VE	EPA/DER agreement; CFR 52.21(j)	5% opacity	
From all fugitive or point sources within coal preparation and handling system which includes any storage pile(s):			
VE	17-2.610(2),FAC; CFR 60.252	20% opacity	

3. Test the emission for the following pollutant(s) indicated from the date of April 10, 1984, notify us 14 days prior to testing, and submit the test report documentation to this office within 45 days after completion of the testing:

Pollutant	Interval
From power boiler stack:	
PM	12 mos.
SO_2	on request
NO_x	on request
CO	on request
VE	12 mos. (for 1 hr. during each run)
From ash handling facility:	see 8/188 letter
VE	12 mos. (~~for 1 hr. during each run~~)
From all fugitive or point sources within coal preparation and handling system which includes any storage pile(s):	
VE	12 mos.

Tests and test reports shall comply with the requirements of Florida Administrative Code Rule 17-2.700(6) and (7), respectively.

PERMITTEE:
Container Corporation of America

Permit No.: AO45-71885
Date of Issue: Dec. 11, 1984
Expiration Date: Dec. 11, 1989

SPECIFIC CONDITIONS:

4. Operation and emission monitoring requirements are:

VE	CEMS; report per CFR 60.7(c)
SO_2[1,4]	CEMS; report per CFR 60.7(c)
NO_x[2]	BACT set pt; continuous; report per CFR 60.7(c)
CO[3]	BACT set pt; continuous; report per CFR 60.7(c)

1 - SO_2: Unless/until an alternate procedure for compliance monitoring of SO_2 in lieu of a CEMS is approved by DER and EPA.

2 - NO_x: BACT set pt. for continuous O_2 monitor at boiler exit to flue shall not be greater than 7.7% as the high limit point at which the allowable NO_x emissions rate shall not be exceeded.

3 - CO: BACT set pt. for continuous O_2 monitor at boiler exit to flue shall not be less than 2.7% as the low limit point at which the allowable CO emission rate shall not be exceeded.

4 - Coal fuel is limited to a maximum sulfur content determined by the following formula:

$$\%S \text{ (max allowed)} = (6.32 \times 10^{-5}) \times (\text{BTU per lb coal}).$$

5. Fuel input shall be monitored and a daily record maintained for a minimum of 2 years.

6. Fuel oil with a maximum sulfur content of 2.5% may be used for startups, shutdowns, and standby when coal is not available.

7. The maximum hours of operation shall be ~~8400~~ 8760 hrs. per year.

8. Dust supression systems shall be used in the coal preparation and handling facilities which includes (a) coal unloading; (b) coal crusher in the power building; (c) coal pile(s), if any; and (d) coal transport conveyors.

9. Permittee shall provide/maintain (1) adequate sampling ports, (2) safe sampling platforms and safe access, and (3) safe utilities for testing equipment.

10. The No. 3 Power Boiler shall not be operated while this boiler (#7 PB) is in operation at any time.

PERMITTEE:
Container Corporation of America

Permit No.: AO45-71885
Date of Issue: Dec. 11, 1984
Expiration Date: Dec. 11, 1989

SPECIFIC CONDITIONS:

11. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two(2) years from the date of recording.

12. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.

13. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide the permitting authority with the following information in writing within five (5) days of such conditions:

    (a) description of noncomplying emissions(s),

    (b) cause of noncompliance,

    (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance

    (d) steps taken by the permittee to reduce and eliminate the noncomplying emission,

    and

    (e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

    Failure to provide the information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

PERMITTEE:
Container Corporation of America

Permit No.: AO45-71885
Date of Issue: Dec. 11, 1984
Expiration Date: Dec. 11, 1989

SPECIFIC CONDITIONS:

14. The permittee shall allow representatives of the Department and/or representatives of the Environmental Protection Agency, upon the presentation of credentials:

(a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are rquired to be kept under the terms and conditions of the permit;

(b) to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;

(c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;

(d) to sample at reasonable times any emission of pollutants, and

(e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

15. Submit an annual operation report for this source on the form supplied by the Department for each calendar year on or before March 1.

16. Forms for renewal will be sent 5 months prior to December 11, 1989 and the completed forms with test results are due 90 days prior to December 11, 1989.

Issued this 11 day of December, 1984

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

G. Doug Dutton, District Manager

--ATTENTION MAIL ROOM--

PLEASE ROUTE THIS DOCUMENT TO:

Jonathan Holton DARP

Name of Individual/Office

5505

Mail Station Number

Department of Environmental Protection

Jeb Bush
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

David B. Struhs
Secretary

April 24, 2003

Mr. Martin Shorey, Plant Manager
Georgia-Pacific Corporation, Hawthorne Plywood Plant
223 Gordon Chapel Road
Hawthorne, FL 32640

Dear Mr. Shorey:

Putnam County – Air Permitting
Georgia-Pacific Corporation, Hawthorne Plywood Plant
AIRS ID Number 1070015; Project Number 004
Request For Additional Information

In accordance with Section 62-4.055(1), Florida Administrative Code (F.A.C.), and Chapter 120, Florida Statutes, (F.S.), the Department has reviewed the subject application and the additional information response received March 27, 2003, and has determined that the following information needs to be submitted before the application can be further processed.

Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

Regarding PM Emissions From the Waste Wood-Fired Boiler (EU 001)

1. On March 27, 2003, the Department received the response letter for additional information dated January 29, 2003. It is stated in this letter that Georgia -Pacific was removing the request to reduce the PM limit for this emission unit from the permit application. On April 17, 2003, however, Margarete Vest held a telephone discussion with Frank Alvarez concerning the possibility of reducing the PM limit for this emissions unit.

   Should Georgia-Pacific Corporation wish to pursue the reduction of the PM limit for the boiler, a completed construction permit application, DEP Form No. 62-210.900(1), reflecting the requested PM limit, along with the last 3 PM stack test results for the boiler should be submitted to the Northeast District Office.

2. The implementation plan submitted with the revised CAM plan is not approvable. While 40 CFR 64.6(e)(2) appears to provide a mechanism for the permittee to submit a compliance schedule in order to finalize CAM indicator range development, it limits the time period to no more than 180 days. Please note that if a facility utilizes the full 180 days allowed under 40 CFR 64.6(e)(2) to determine and submit indicator ranges and they are not approved by the Department, the facility will then be out of compliance with 40 CFR Part 64. Therefore, in an effort to avoid such a scenario, it is preferred to maintain your application in an incomplete status just long enough to approve your CAM plan. Pursuant to Rule 62-213.420(1)(b)2., F.A.C., there are not any adverse consequences with this approach providing that your renewal application was submitted in a timely manner thus allowing continued operation under your previous Title V permit pending final action on the renewal application, and you comply with the response deadlines to requests from the Department as stated in Rule 62-213.420(1)(b)4., F.A.C.

3. In the State of Florida, the mechanism for approval of monitoring choices for CAM applicability is through the issuance of a Final Title V permit, which contains the necessary Requirements. Therefore, please evaluate available monitoring equipment and provide a CAM plan based on what is currently at the plant (i.e. the voltage drop across the ESP as mentioned in the first submittal). When revising the CAM plan, keep in mind that pursuant to 40 CFR 64.3(b)(4) emissions units that have the potential to emit greater than 100 tons of regulated pollutants per year must have a monitoring frequency of at least 4 times per hour. Emissions units that have the potential to emit less than 100 tons per year must have a monitoring frequency of at least once per day.

4. The revised CAM update, dated April 14, 2003, stated that compliance tests will be performed which require shutting down portions of the ESP. When performing compliance tests in order to establish the value of the indicator ranges, be advised that shutting down portions of the ESP could be considered a circumvention of the control device and could result in an exceedance of the permitted emission rate. This type of activity requires the issuance of a short-term construction permit. If this is your intention, please contact our office (Northeast District) as soon as possible. However, because CAM indicator ranges should be established to be reflective of normal operations, and should be protective of the permitted emissions limit, it appears that such an activity shouldn't be necessary.

5. Please provide the revised CAM plan following the format of the EPA CAM Technical Guidance Document examples, in both hard copy to the Northeast District Office and electronic (in Word format) to Jonathan Holtom at DARM. The previous submissions generally followed the examples but are lacking the Monitoring Approach Table and need further explanation in the Justification section.

6. Please provide a copy of the emissions test results that were/will be used to select the indicator ranges.

Regarding PM and VOC Emissions From the Veneer Dryers (EU 005)

7. While the RTO does reduce emissions of VOC, the permit does not contain a specific emissions limiting standard for VOC. Therefore, there is no requirement to comply with the CAM regulations for VOC emitted from this emissions unit.

8. From a review of the facility history, it appears that the RTO was a required installation for the purposes of reducing VOC emissions. An RTO is not indicated for use as a PM control device. It is not clear what the origin of the PM limits is, or whether the permitted limits can be met without the RTO. Please provide information regarding the basis of the PM emissions limit. Also, provide a discussion about compliance with the emissions limit and the role of the RTO.

9. If it is determined that CAM truly does apply to this unit, please provide the revised CAM plan following the format of the EPA CAM Technical Guidance Document examples as stated in Item No. 5 above.

The above comments require a written response to the Department within ninety days of receipt of this notice unless additional time is requested pursuant to Rule 62-213.420(1)(b)6., F.A.C.

All information requested must be submitted by the applicant and certified by the professional engineer named in the application. Two copies of the requested information must be submitted.

Should you have any questions concerning this matter, please contact Frank Alvarez at (904) 807-3243.

Sincerely,

Christopher L. Kirts, P.E
District Air Program Administrator

CLK:FFA
cc: Margarete M. Vest, P.E.
Jonathan Holtom, P.E., DEP - DARM

Request for Additional Information

Georgia Pacific – Hawthorne Plant
Title V Permit Renewal
Project Number: 1070015-004-AV

To: Frank Alvarez

From: Jonathan Holtom JH

Date: April 18, 2003

The following comments/questions are a result of my review of the submitted CAM plans for Subject facility. You may be able to answer them yourself, or you may use these questions in a further request for additional information.

Regarding PM Emissions From the Waste Wood-Fired Boiler (EU 001)

1. The implementation plan submitted with the revised CAM plan is not approvable. While 40 CFR 64.6(e)(2) appears to provide a mechanism for the permittee to submit a compliance schedule in order to finalize CAM indicator range development, it limits the time period to no more than 180 days. It also does not work well under Florida law. The only way that we can approve your monitoring choices is through the issuance of a Final Title V permit which contains the necessary requirements. In addition, if you utilize the full 180 days to determine and submit your indicator ranges and we do not approve your choices, you will then be out of compliance with Part 64. Therefore, it is our desire to maintain your application in an incomplete status just long enough to approve your CAM plan. There is no problem with doing this provided that your application was submitted in a timely manner (so you can continue to operate under your past Title V permit pending final action on the renewal application), and provided that you do not miss any deadlines for responding to requests from the Department.

2. Please evaluate the available monitoring equipment and provide a CAM plan based on what is currently at the plant (i.e. the voltage drop across the ESP as mentioned in the first submittal). When revising the CAM plan, keep in mind that emissions units that have the potential to emit greater than 100 tons of regulated pollutants per year must have a monitoring frequency of at least 4 times per hour. Emissions units that have the potential to emit less than 100 tons per year must have a monitoring frequency of at least once per day.

3. When performing compliance tests in order to establish the value of the indicator ranges, be advised that shutting down portions of the ESP could be considered a circumvention of the control device and could result in an exceedance of the permitted emission rate. This type of activity requires the issuance of a short-term construction permit. If this is your intention, please contact our office (Northeast District) as soon as possible. However, it shouldn't be necessary because indicator ranges should be established to be reflective of normal operations, and should be protective of the permitted emissions limit.

4. Please provide the revised CAM plan following the format of the EPA CAM Technical Guidance Document examples, in both hard copy and electronic (in Word format). The previous submissions generally followed the examples but are lacking the Monitoring Approach table and need more explanation in the Justification section.

5. Please provide a copy of the emissions test results that were/will be used to select the indicator ranges.

Regarding PM and VOC Emissions From the Veneer Dryers (EU 005)

6. While the RTO does reduce emissions of VOC, the permit does not contain a specific emissions limiting standard for VOC. Therefore, there is no requirement to comply with the CAM regulations for VOC emitted from this emissions unit.

7. From a review of the facility history, it appears that the RTO was a required installation for the purposes of reducing VOC emissions. An RTO is not indicated for use as a PM control device. It is not clear what the origin of the PM limits is, or whether the permitted limits can be met without the RTO. Please provide information regarding the basis of the PM emissions limit. Also, provide a discussion about compliance with the emissions limit and the role of the RTO. (Frank, do you have any insight into this issue? I don't understand why they even have a PM limit. I'm not able to find the applicable requirement. In addition, if there is a valid reason for it, I don't think that our rules require annual testing for a 30 tpy source. 62-297.310 only requires testing once every five years. Does the AC require annual testing? I think there might be a few problems here and I don't think that CAM will apply to this unit.)

8. If it is determined that CAM truly does apply to this unit, please provide the revised CAM plan following the format of the EPA CAM Technical Guidance Document examples, in both hard copy and electronic (in Word format). The previous submissions generally followed the examples but are lacking the Monitoring Approach table and need more explanation in the Justification section.

After you review these comments, please call me if you have any questions. I can be reached at SunCom 291-9531.

From Cindy Millsey

CAM Plan Comments

Hawthorne Plywood Plant - Waste-wood fired boiler with ESP for particulate control

1. Can't find much about "inductance angle" however, secondary voltage/current can be used to determine power input to each electrode.
2. The minimum monitoring frequencies are 4/hour if post control emissions $\geq$ the major source threshold and 1/day if post control emissions are $<$ the major source threshold. However, if they have the data, why can't they report hourly averages?
3. The "Rationale for Selection of Performance Indicators" section is very weak. This paragraph does not convince me of anything.
4. The "Rationale for Selection of Indicator Ranges" will be based on a demonstration recommended by the manufacturer. Why can't they base this on recent normal operation?
5. The following Performance Criteria for the monitoring is not included:
    a. Specs for obtaining representative data
    b. Verification procedures.
    c. QA/QC procedures
    d. Data averaging period
6. Emissions test data is not included.

Hawthorne Plywood Plant – Regenerative Thermal Oxidizer for VOC Control

1. 15-minute averages are to be averaged twice daily. Is it a good idea to have such a long averaging period?
2. The Rationales for selection of Performance Indicators and Ranges are acceptable, however the examples in the CAM Technical Guidance Document include annual burner inspection. Is there a reason for not doing this?
3. The following Performance Criteria for the monitoring is not included
    a. Specs for obtaining representative data
    b. Verification procedures.
    c. QA/QC procedures
4. Emissions test data is not included.

Implementation Plan

The implementation time period begins upon approval of the CAM Plan

Estimated Time Span	ACTION PLAN
One month	Order voltmeter
Two months	Receive and install equipment
One months	Train personnel on its use and calibrate equipment
One month	Prepare for Stack Test
One month	Receive and evaluate Stack Test to determine operational parameters
Two months	Submit proposed parameters and receive approval from FDEP
Total of 8 months	Full implementation of CAM Plan

Measurement Approach

The secondary voltage is measured using a voltmeter.

Indicator Range

An excursion is defined as an ESP power input less than an amount in kilovolts to be determined during the performance test for the CAM parameter. Excursions will prompt an inspection, corrective action, and record of the actions taken.

Data Representativeness

The secondary kilovolt reading is the best indicator of the ESP's power in the cell and therefore operations.

QA/QC Practices

Confirm the meters reads zero when the unit is not operating. Use manufacturer's recommendations.

Monitoring Frequency

The secondary voltage is measured every 15 minutes and used to calculate the kilovolt average input over a 3 hour time span. In the event the DCSI recording equipment is malfunctioning, the data will be manually recorded every hour. 4x/hr !

Data Collection Procedures.

The readings will be documented every 15 minutes and averaged over a three-hour period for comparison to the standard established during the stack test for determining the ESP's operating level. A Distributed Control System Interface, DCSI, will be installed to connect the transformer controller to a computer port. The computer will collect the secondary kilovolt information.

MONITORING APPROACH JUSTIFICATION

I. Background

The emissions unit (EU) consists of the boiler and related appurtenances in the steam production area. The process consists of fuel feeders, a grate, steam tubes, fire box, heat exchangers, and duct work. The boiler operates continuously when the plant is in normal operation. Wood waste is spread on the grate, where it burns to heat water in the tubes. Exhaust gases pass across an economizer then through a multi-clone, after which they pass through the ESP. The boiler is pressurized by a forced-draft fan, which pushes the exhaust gases through the system.

II. Rationale for Selection of Performance Indicators

The most reliable and practical value for the plant personnel to monitor is the secondary kilovolts. It is a good indicator of the ESP's performance. To comply with the applicable emission limit a minimum secondary voltage must be maintained. The secondary voltage will drop when a malfunction occurs which causes less particulate to be charged and collected and hence an indicator of problems that require attention.

III. Rationale for Selection of Indicator Ranges

The indicator ranges will be selected based on the following test as recommended by the manufacturer. One of the three ESP cells will be shut down, and the kilovolt readings on the other two cells will be reduced manually until visible emissions begin to appear from the stack. The secondary voltages readings of the two operating TR sets at this threshold point are added.

Since PM removal increases with increasing secondary voltage the emissions unit will be deemed to be in compliance as long as the sum of the secondary voltages of all operating TR sets are greater than the threshold value determined for the two cells during the CAM stack test.

Compliance will be demonstrated by recording the secondary voltage of each TR set every 15 minutes by the computer system or manually once every hour if the computer system is malfunctioning.

Records will not be kept when the boiler is not in operation. The minimum secondary kilovolt standard will not apply to the ESP during periods of startup or shutdown while the ESP is its period of energization or de-energization. Startup periods may last 8 hours. The time period for shutdown may last 8 hours. The periods of startup/shutdown time will be documented along with visible emissions on an hourly basis.

CAM Plan for Electro-Static Precipitator for Particulate Matter Control
Hawthorne Plywood Plant

I. Background

A. Emissions Unit

Description:	Waste-wood Fired Boiler
Manufacturer:	Zurn
Capacity:	224 MMBtu/hour
Facility:	Hawthorne Plywood Plant 223 Gordon Chapel Road Hawthorne, Florida 32640

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation:	Permit 1070015-001-AV
Emissions limit:	0.15 lb/MMBtu (PM) 33.6 pounds per hour 146.76 tons per year

C. Control Technology

Description:	Electro-static Precipitator (ESP)
Manufacturer:	PPC Industries 3-cell, model 2OR-1330-3712S
Capacity:	99,100 ACFM

II. Monitoring Approach

Parameters to Monitor: Performance of the ESP will be measured by the secondary kilovolts for each cell of the ESP. The secondary voltage from each TR set will be recorded every 15 minutes to determine the power to each cell of the ESP.

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION) 3.

1. Jonathan Holtom

2. DAIR MS 5505 5.

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

____ FOR YOUR INFORMATION

X HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

____ FOR YOUR FILES

COMMENTS:

CAM
Plan - Jefferson
Smurfit - FB

RECEIVED
JUN 23 2003
BUREAU OF AIR REGULATION

FROM: Rita Smith DATE: 6-16-03 PHONE: 804-3237

DEP 15-026 (12/93)

COMPLIANCE ASSURANCE MONITORING PLAN

(CAM PLAN)

for

Jefferson Smurfit Corporation (U.S.)

Fernandina Beach Mill

Revised
June 11, 2003

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1.0 EMISSION UNITS REQUIRING CAM PLANS

1.1 CAM RULE APPLICABILITY DEFINITION

On June 15, 1998 the Florida Department of Environmental Protection (FDEP) issued a Title V Air Operation permit (Permit No. 0890003-001-AV) to the Jefferson Smurfit Corporation's (JSC) Fernandina Beach Mill. This permit expires on June 15, 2003. In order to renew the permit, a renewal application must be submitted to the Florida Department of Environmental Protection (FDEP).

As part of the Title V renewal application, a Compliance Assurance Monitoring (CAM) Plan must be submitted as required by regulations adopted in Title 40, Part 64 of the Code of Federal Regulations (40 CFR 64). This regulation has been incorporated by reference in Rule 62-204.800, F. A. C., and implemented in Rule 62-213.440, F. A. C.

CAM plans are required for all Title V permitted emission units using control devices to meet federally enforceable emission limits or standards with pre-control emissions greater than "major" source thresholds. The term "major" is defined as in the Title V Regulations (40 CFR 70), but applied on a source-by-source basis.

Specifically exempted from the CAM Rule are emissions units subject to requirements under Stratospheric Ozone Regulations (40 CFR 82), the Acid Rain Program (40 CFR 72), or that are part of an emission cap included in the Title V Permit. Also exempt are emission units subject to New Source Performance Standards (40 CFR 60) and National Emission Standards for Hazardous Air Pollutants (40 CFR 63) promulgated after November 15, 1990, as these sources have equivalent monitoring requirements included as part of the standard.

1.2 EMISSIONS UNITS REQUIRING CAM PLANS

A review of emission units at the JSC Fernandina Beach Mill was conducted to determine the applicability of the CAM Rule. This evaluation was conducted for each emission unit and regulated pollutant. First, the existence of a "control device" as defined by the CAM Rule was determined on a source-by-source basis for each pollutant. Those emission units without control devices were eliminated from further consideration. The remaining emission units were then evaluated on a

pollutant-by-pollutant basis to determine if a control device was used to meet a federally enforceable emission limit or standard.

Each pollutant without a federally enforceable emission limit or standard, emitted from a given emission unit, was eliminated from further consideration. Uncontrolled annual emissions were then calculated for each remaining source-pollutant combination. If uncontrolled emissions for a pollutant emitted from a given emission unit were below major source thresholds, as defined by the CAM Rule, that pollutant was not further considered.

A summary of the results of this evaluation process is presented in Table 1. Supporting information is presented in Tables 2 and 3. Specific exemptions to the applicability of the CAM Rule were also considered in this evaluation.

Each pollutant-specific emissions unit identified to require a CAM plan is described below.

1.2.1 NO. 5 POWER BOILER (EU 006)

JSC operates the No. 5 Power Boiler fired by carbonaceous fuel and No. 6 fuel oil in any combination. The No. 5 Power Boiler has a maximum heat input rate of 457 MMBtu/hr when firing carbonaceous fuel (24-hour average), 657.8 MMBtu/hr when firing No. 2 or No. 6 fuel oil (1-hour average), 573.4 MMBtu/hr when firing No. 2 or No. 6 fuel oil (24-hour average), and 805 MMBtu/hr when firing any combination of these fuels.

No. 5 Power Boiler has federally enforceable emission limits for PM, SO_2, and TRS. The No. 5 Power Boiler utilizes an electrostatic precipitator (ESP) to control PM emissions. As shown in Table 3, uncontrolled PM emissions are greater than 100 TPY. Since a federally enforceable emission limit exists for PM, a control device is used to comply with the PM emission limit, and uncontrolled PM emissions are greater than 100 TPY, a CAM plan is required for the No. 5 Power Boiler for PM. Since there is no control device controlling SO_2 or TRS emissions from the No. 5 Power Boiler, CAM plans for SO_2 and TRS are not required.

Cam for PM
Not for SO_2
or TRS

1.2.2 NO. 4 RECOVERY BOILER (EU 007)

The No. 4 Recovery Boiler fires black liquor solids (BLS) and/or No. 6 fuel oil. The No. 4 Recovery Boiler has a maximum operating rate of 137,500 lb/hr BLS as a 24-hour average, and 2,981 barrels/day when firing No. 6 fuel oil alone or in combination with BLS.

The No. 4 Recovery Boiler has federally enforceable emission limits for PM and TRS. PM emissions from the No. 4 Recovery Boiler are controlled with an ESP. As shown in Table 1, uncontrolled PM emissions are greater than 100 TPY. Since a federally enforceable emission limit exists for PM, a control device is used to comply with the PM emission limit, and uncontrolled PM emissions are greater than 100 TPY, a CAM plan is required for the No. 4 Recovery Boiler for PM. Since there is no control device controlling TRS emissions from the No. 4 Recovery Boiler, a CAM plan for TRS is not required.

1.2.3 NO. 5 RECOVERY BOILER (EU 011)

The No. 5 Recovery Boiler fires BLS and No. 6 fuel oil, and has a maximum operating rate of 156,780 lb/hr BLS as a 24-hour average, and 3,012 barrels/day when firing No. 6 fuel oil; alone or in combination.

The No. 5 Recovery Boiler has federally enforceable emission limits for PM and TRS. PM emissions from the No. 5 Recovery Boiler are controlled with an ESP. As shown in Table 1, uncontrolled PM emissions are greater than 100 TPY. Since a federally enforceable emission limit exists for PM, a control device is used to comply with the PM emission limit, and uncontrolled PM emissions are greater than 100 TPY, a CAM plan is required for the No. 5 Recovery Boiler for PM. Since there is no control device for TRS emissions from the No. 5 Recovery Boiler, a CAM plan for TRS is not required.

1.2.4 NO. 4 SMELT DISSOLVING TANK (EU 013)

The No. 4 Smelt Dissolving Tank, associated with the No. 4 Recovery Boiler, has a maximum operating rate of 137,500 lb/hr BLS as a 24-hour average. The No. 4 Smelt Dissolving Tank has federally enforceable limits for PM and TRS. A venturi scrubber is used to control emissions of PM and TRS. As shown in Table 1, uncontrolled PM and TRS emissions are greater than 100 TPY. Since a federally enforceable emission limit exists for PM and TRS, a control device is used to

comply with the PM and TRS emission limits, and uncontrolled PM and TRS emissions are greater than 100 TPY, a CAM plan is required for the No. 4 Smelt Dissolving Tank for PM and TRS.

1.2.5 NO. 5 SMELT DISSOLVING TANK (EU 014)

The No. 5 Smelt Dissolving Tank, associated with the No. 5 Recovery Boiler, has a maximum operating rate of 156,780 lb/hr BLS as a 24-hour average. This emissions unit has federally enforceable limits for PM and TRS. A venturi scrubber is used to control emissions of PM and TRS. As shown in Table 1, uncontrolled PM and TRS emissions are greater than 100 TPY. Since a federally enforceable emission limit exists for PM and TRS, a control device is used to comply with the PM and TRS emission limits, and uncontrolled PM and TRS emissions are greater than 100 TPY, a CAM plan is required for the No. 5 Smelt Dissolving Tank for PM and TRS.

1.2.6 NO. 7 POWER BOILER AND COAL AND FLY ASH HANDLING SYSTEM (EU 015)

The No. 7 Power Boiler combusts coal, No. 6 fuel oil and/or No. 2 fuel oil. The maximum operating rates for the No. 7 Power Boiler are 81,680 lb/hr of coal (24-hour average), and 6,800 gal/hr of No. 6 or No. 2 fuel oil (24-hour average).

The No. 7 Power Boiler has federally enforceable emission limits for PM, SO_2, NO_x, and CO. An ESP controls the PM emissions from the No. 7 Power Boiler. As shown in Table 1, uncontrolled PM emissions are greater than 100 TPY. Since a federally enforceable emission limit exists for PM, a control device is used to comply with the PM emission limit, and uncontrolled PM emissions are greater than 100 TPY, a CAM plan is required for the No. 7 Power Boiler for PM. Since there is no control device on the boiler for SO_2, NO_x, or CO, CAM plans are not required for these pollutants.

The Fly Ash Silo has a federally enforceable emission limit for PM. A baghouse controls the PM emissions from the Fly Ash Silo. Since uncontrolled PM emissions are less than 100 TPY, a CAM plan is not required for the Fly Ash Silo.

1.2.7 TALL OIL PLANT (EU 020)

The Tall Oil Plant operates at a maximum operating rate of 17,000 lb/hr of tall oil (12-hour average). The Tall Oil Plant has a federally enforceable emission limit for TRS. TRS emissions from the Tall Oil Plant are controlled by a scrubber. As shown in Table 1, uncontrolled TRS emissions are less than 100 TPY. Therefore, a CAM plan is not required for the Tall Oil Plant.

1.2.8 NO. 4 LIME KILN (EU 021)

The No. 4 Lime Kiln operates at a maximum lime production rate of 630 TPD, corresponding to a process input rate of 46.87 TPH of lime mud ($CaCO_3$). The No. 4 Lime Kiln has federally enforceable emission limits for PM and TRS. An ESP controls the PM from the No. 4 Lime Kiln. As shown in Table 1, uncontrolled PM emissions are greater than 100 TPY. Since a federally enforceable emission limit exists for PM, a control device is used to comply with the PM emission limit, and uncontrolled PM emissions are greater than 100 TPY, a CAM plan is required for the No. 4 Lime Kiln for PM. Since TRS emissions are not controlled by a control device, a CAM plan is not required for TRS.

1.2.9 BROWNSTOCK WASHER C-LINE (EU 024)

The C-Line Brownstock Washing System has a maximum operating rate of 51,000 lb/hr dry pulp as a 24-hour average. The Brownstock Washer C-Line has a federally enforceable limit for TRS. TRS emissions from the Brownstock Washer C-Line are controlled with a scrubber. As shown in Table 1, uncontrolled TRS emissions are less than 100 TPY. Therefore, a CAM plan for TRS is not required.

1.2.10 PULPING SYSTEM-MACT I (EU 033)

The Pulping System-MACT I emissions unit (i.e., sources subject to MACT I) utilizes the No. 4 Lime Kiln and the No. 5 Power Boiler to control TRS emissions. Under the State of Florida TRS rules, the Pulping System has a federally enforceable emission limit for TRS. However, these emissions are accounted for in the No. 4 Lime Kiln and No. 5 Power Boiler emissions. Since uncontrolled TRS emissions are greater than 100 TPY, a CAM plan is required for this emissions unit.

1.2.11 PACKAGE BOILER

JSC operates a package boiler that combusts No. 2 fuel oil at a maximum rate of 190 MMBtu/hr. The Department approved operation of the Package Boiler in a letter dated February 29, 1996. The letter approval did not contain any emission limits. JSC is currently in the process of obtaining an after-the-fact construction permit for the boiler. In addition, the Package Boiler does not have any control equipment. Therefore, a CAM plan is not required for the Package Boiler.

Table 1. CAM Applicability Determination for Jefferson Smurfit, Fernandina Beach

Emission Source	Title V EU ID	Control Equipment	Pollutants with Emission Limits	Uncontrolled Emission Rate (TPY)[a]		CAM Plan Required? (Yes/No)	Pollutants Requiring CAM	Comments
				PM/PM_{10}	TRS			
No. 5 Power Boiler	006	ESP	PM, SO_2	1,121	--	Yes	PM	PM uncontrolled emissions >100 TPY. No add-on controls for SO_2.
No. 4 Recovery Boiler	007	ESP	PM, TRS	55,407	--	Yes	PM	PM uncontrolled emissions >100 TPY. No add-on controls for TRS.
No. 5 Recovery Boiler	011	ESP	PM, TRS	63,176	--	Yes	PM	PM uncontrolled emissions >100 TPY. No add-on controls for TRS.
No. 4 Smelt Dissolving Tank	013	Venturi Scrubber	PM, TRS	1,686	100	Yes	PM, TRS	PM and TRS uncontrolled emissions >100 TPY.
No. 5 Smelt Dissolving Tank	014	Venturi Scrubber	PM, TRS	1,923	112	Yes	PM, TRS	PM and TRS uncontrolled emissions >100 TPY.
No. 7 Power Boiler	015	ESP	PM, SO_2, NO_x, CO	12,522	--	Yes	PM	PM uncontrolled emissions >100 TPY. No add-on controls for SO_2, NO_x or CO.
Fly Ash Silo	015	Baghouse	PM	0.05	--	No	--	PM uncontrolled emissions < 100 TPY.
Tall Oil Plant	020	Scrubber	TRS	--	27	No	--	TRS uncontrolled emissions <100 TPY.
No. 4 Lime Kiln	021	ESP	PM, TRS	23,372	--	Yes	PM	PM uncontrolled emissions >100 TPY. No add-on controls for TRS.
Brownstock Washer--C-Line	024	Scrubber	TRS	--	52	No	--	TRS uncontrolled emissions <100 TPY.
Pulping System--MACT I	033	No. 4 Lime Kiln, No. 5 Power Boiler	TRS	--	>100	Yes	TRS	TRS uncontrolled emissions >100 TPY.
Package Boiler	--	None	None	--	--	No	--	No control devices or emission limits.

[a] Refer to Tables 2 and 3 for uncontrolled emission rate calculations.

Table 2. Summary of Uncontrolled TRS Emission Rates for Sources Potentially Applicable to the CAM Plan Requirements, Jefferson Smurfit, Fernandina Beach

			Uncontrolled TRS Emissions		
Emission Source	Title V EU ID	Production/ Process Rate	Emission Factor	Ref.	Emission Rate [a] (TPY)
No. 4 Smelt Dissolving Tank	013	137,500 lb/hr BLS	0.33 lb/ton BLS	1	100.38
No. 5 Smelt Dissolving Tank	014	156,780 lb/hr BLS	0.33 lb/ton BLS	1	111.94 [b]
Tall Oil Plant	020	17,000 lb/hr tall oil	0.72 lb/ton tall oil	2	26.69
Brownstock Washer--C-Line	024	51,000 lb/hr ODP	0.42 lb/ton ADUP	3	51.60
Pulping System--MACT I	033	-- --	-- --		> 100

1. Based on AP-42 Table 10.2-1, Emission Factors for Kraft Pulping (9/90).
   TRS = 0.5 lb/ADTP / 1.5 ton BLS/ADTP = 0.33 lb TRS/ton BLS.
2. Based on NCASI Technical Bulletin No. 650 (6/93)--"Compilation of Air Toxic Emission Data for Boilers, Pulp Mills, and Bleach Plants", Table 15; factor for tall oil reactor vents (dimethyl sulfide + dimethyl disulfide + methyl mercaptan + hydrogen sulfide = TRS).
3. AP-42 Table 10.2-1, Emission Factors for Kraft Pulping (9/90); factor for untreated brown stock washer. Factor of 1.1 ton ADUP = 1.0 ton ODUP used to convert.

Notes:
ADUP = air-dried unbleached pulp
BLS = black liquor solids
ODUP = oven-dried unbleached pulp

[a] Based on 8,760 hr/yr operation, unless otherwise noted.

[b] Based on 8,568 hr/yr (from Title V permit).

Table 3. Summary of Uncontrolled PM Emission Rates for Sources Potentially Applicable to the CAM Plan Requirements
Jefferson Smurfit, Fernandina Beach

			Uncontrolled PM Emissions		
Emission Source	Title V EU ID	Production/ Process Rate	Emission Factor	Ref.	Emission Rate [a] (TPY)
No. 5 Power Boiler	006	457 MMBtu/hr (bark)	0.56 lb/MMBtu	1	1,121
No. 4 Recovery Boiler	007	137,500 lb/hr BLS	230 lb/ton ADUP	2	55,407
No. 5 Recovery Boiler	011	156,780 lb/hr BLS	230 lb/ton ADUP	2	63,176
No. 4 Smelt Dissolving Tank	013	137,500 lb/hr BLS	7 lb/ton ADUP	2	1,686
No. 5 Smelt Dissolving Tank	014	156,780 lb/hr BLS	7 lb/ton ADUP	2	1,923
No. 7 Power Boiler	015	1,021 MMBtu/hr	2.8 lb/MMBtu	3	12,522
Fly Ash Silo	015	25,043 TPY fly ash	0.0044 lb/ton fly ash	4	0.05
No. 4 Lime Kiln	021	26.25 TPH CaO	56 lb/ton ADUP	5	23,372

1. Based on uncontrolled emission factor for bark burning from AP-42 Table 1.6-1, Emission Factors for PM from Wood Residue Combustion.
2. AP-42 Table 10.2-1, Emission Factors for Kraft Pulping (9/90); untreated emission factors for non-contact recovery boiler. Factor of 0.8 tons ADUP/ton BLS used to convert.
3. Based on uncontrolled emission factor of 10A lb PM/ton coal from AP-42 Table 1.1-4, Emission Factors for PM and PM-10 from Bituminous and Subbituminous Coal Combustion, where A = 7% ash, and the heat content of coal: 12,500 Btu/lb.
4. Process rate based on 357,758 TPY of coal processed and 7% of coal is ash.
   Emission factor from the drop equation (AP-42 Section 13.2.4-3):
   $E = k * (0.0032) * (U/5)^{(1.3)} / (M/2)^{(1.4)}$
   where:
   k = 0.74 (AP-42 Section 13.2.4-3)
   U = 8 mph (based on 41-year average from Jacksonville)
   M = 2% (facility data)
5. AP-42 Table 10.2-1, Emission Factors for Kraft Pulping (9/90); untreated emission factor for lime kilns. Factor of 3.63 tons ADUP/ton CaO used to convert.

Notes:
ADUP = air-dried unbleached pulp
BLS = black liquor solids
MMBtu = million british thermal units

[a] Based on 8,760 hr/yr operation.

2.0 PARTICULATE MATTER EMISSIONS FROM THE NO. 5 POWER BOILER

2.1 EMISSIONS UNIT IDENTIFICATION

No. 5 Power Boiler—EU ID 006

2.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

The No. 5 Power Boiler has a particulate matter (PM) emission limit of 0.3 lb/MMBtu and 137.1 lb/hr for carbonaceous fuel, plus 0.1 lb/MMBtu and 34.8 lb/hr for No. 6 fuel oil; for a total PM emission rate of 171.9 lb/hr and 600.50 TPY. When firing only No. 6 fuel oil, PM emissions are limited to 0.1 lb/MMBtu, 65.78 lb/hr, and 251.15 TPY [Rule 62-296.410(1)(b)2, F.A.C.]. The current visible emissions (VE) limit is 30-percent opacity, with an exception of up to 40-percent opacity for 2 minutes per hour [Rule 62-296.410(1), F.A.C.].

PM and VE compliance testing is required annually on the No. 5 Power Boiler. In addition, a continuous opacity monitoring system (COMS) is required to be used to record the opacity of the stack flue gas. The COMS must be properly calibrated, operated, and maintained in accordance with Rule 62-297.520, F.A.C.

2.3 CONTROL TECHNOLOGY DESCRIPTION

PM emissions from the No. 5 Power Boiler are controlled by an electrostatic precipitator (ESP). The effectiveness of the ESP is evaluated with an annual stack test and continuous opacity measurements. A detailed description of the control equipment was included in the Title V renewal application (Attachment JSF-EU1-J3).

2.4 MONITORING APPROACH

The monitoring approach is to use either opacity (Option A) or ESP power (Option B) as the indicator of PM emissions. JSC has limited data correlating these parameters to PM emissions. The CAM rules, as described at 40 CFR 64.4(d) and (e), provide for an adequate amount of time to install and test necessary monitoring equipment, including the submission of a test plan and schedule to obtain performance data. JSC will conduct a testing program to determine which indicator parameter provides for the most reliable indicator of actual PM emissions. Initial testing will be completed within 90 days of issuance of the Title V permit approving the CAM monitoring approach. The results of the testing as well as the selected indicator parameter and parameter ranges will be

monitor for a few days and provide Range

NO! again!

submitted to the Department within 90 days of completion of the testing. The monitoring approach is summarized in the following table.

	***Option A*–Indicator No. 1**	***Option B*–Indicator No. 1**
Indicator	Opacity of ESP exhaust.	ESP secondary voltage and current are measured for each field to determine the total power to the ESP.
Measurement Approach	COMS in ESP exhaust.	The secondary voltage is measured using a voltmeter and the secondary current is measured using an ammeter. The total power (P expressed as kW) input to the ESP is the sum of the products of the secondary voltage (V) and current (I) in each field. ($P = V_1I_1 + V_2I_2 + \ldots + V_nI_n$)
Indicator Range	The opacity indicator range will be established at or below an opacity level where the ESP has demonstrated at least a 10 percent margin of compliance with the PM limit. An hourly average opacity value is selected to prevent momentary process perturbations from causing an excursion. When the average 1-hour opacity is outside the indicator range, an inspection, corrective action, and recordkeeping and reporting are triggered.	An excursion is defined as an ESP power input less than a minimum kW (to be determined). Excursions trigger an inspection, corrective action, and a reporting requirement.
Data Representative-ness	Install the COMS at a representative location in the ESP exhaust.	The voltage and current are measured using standard instrumentation provided for this purpose.
Verification of Operational Status	NA	NA
QA/QC Practices and Criteria	The COMS automatically calibrates every 24 hours. Calibration information is recorded through a data acquisition system (DAS). A neutral density filter test is performed quarterly as well as preventative maintenance items as prescribed by the manufacturer.	Confirm the meters read zero when the unit is not operating.
Monitoring Frequency	Monitor the opacity of the ESP exhaust continuously.	The secondary voltage and current are measured continuously and used to calculate the power input every 15 minutes.
Data Collection Procedures	The DAS retains all 6-minute and hourly average opacity data.	The hourly average power input is calculated and recorded.
Averaging Period	1-hour block average. Use the 10-second opacity data to calculate the hourly block average opacity.	1-hour block averaging period.

2.5 JUSTIFICATION

JSC is proposing to monitor either opacity or total ESP power, depending on which indicator provides the best correlation with PM emissions. The correlation will be determined through a testing program.

ESP parameters are generally recognized indicators of PM emissions. Lower opacity is generally indicative of good operation and maintenance of the ESP. PM emissions generally increase with increasing opacity.

In an ESP, electric fields are established by applying a direct-current voltage across a pair of electrodes, a discharge electrode and a collection electrode. Particulate matter suspended in the gas stream is electrically charged by passing through the electric field around each discharge electrode (the negatively charged electrode). The negatively charged particles then migrate toward the positively charged collection electrodes. The particulate matter is separated from the gas stream by retention on the collection electrode. Particulate is removed from the collection plates by shaking or rapping the plates.

Generally, ESP performance improves as total power input increases. This relationship holds true when PM and gas stream properties (such as PM concentration, size distribution, resistivity, and gas flow rate) remain stable and all equipment components (such as rappers, plates, wires, hoppers, and transformer-rectifiers) operate satisfactorily.

The secondary voltage drops when a malfunction, such as ground electrodes, occurs in the ESP. When the secondary voltage drops, less particulate is charged and collected. Also, the secondary voltage can remain high but fail to perform its function if the collection plates are not cleaned, or rapped, appropriately. If the collection plates are not cleaned, the current drops. Thus, since the power is the product of the voltage and the current, monitoring the power input will provide a reasonable assurance that the ESP is functioning properly. Problems that may not be detected by monitoring other parameters individually will be manifested in the total power input.

The indicator ranges will be determined through a testing program. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence, to determine the action required (if any) to correct the situation. All excursions will be documented and reported.

3.0 PARTICULATE MATTER EMISSIONS FROM THE NO. 4 RECOVERY BOILER

3.1 EMISSIONS UNIT IDENTIFICATION

No. 4 Recovery Boiler—EU ID 007

3.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

The No. 4 Recovery Boiler has a PM emission limit of 3 lb/3000 lb of black liquor solids (BLS); 137.5 lb/hr, and 602.25 TPY [Rule 62-296.404(2)(a), F.A.C.]. The current VE limit is 45-percent, with an exception of up to 60-percent for up to 6 minutes per hour [Rule 62-296.404(1)(a), F.A.C.].

How do these compare?

The PM emission limit for the No. 4 Recovery Boiler will be reduced by March 2004 when the MACT II regulations (40 CFR 63, Subpart MM) take effect. The new PM emission limit will be 0.044 gr/dscf @ 8-percent O_2 [40 CFR 63.862(a)(1)(i)(A)]. In addition, the new opacity limit will be 35 percent, with a violation occurring if this level of opacity is exceeded for greater than 6 percent of the time during any calendar quarter [40 CFR 63.864(c)(2)(i)].

Must still do CAM for Capl with SIP Limit meeting MACT assures compliance with the SIP.

PM and VE compliance testing is required annually for the No. 4 Recovery Boiler.

3.3 CONTROL TECHNOLOGY DESCRIPTION

PM emissions from the No. 4 Recovery Boiler are controlled by an ESP. A detailed description of the control equipment was included in the Title V renewal application (Attachment-JSF-EU2-J3).

3.4 MONITORING APPROACH

The monitoring approach is based on the MACT II regulations (40 CFR 63, Subpart MM), as they apply to existing recovery boilers. The monitoring approach is presented in the following table.

	Indicator No. 1
Indicator	Opacity of ESP exhaust.
Measurement Approach	COMS in ESP exhaust.
Indicator Range	Per MACT II requirements, an excursion is defined as the average of 10 consecutive 6-minute average opacity readings resulting in a measurement greater than 20-percent opacity. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.
Data Representativeness	Install the COMS at a representative location in the ESP exhaust.
Verification of Operational Status	NA
QA/QC Practices and Criteria	The COMS is automatically calibrated every 24 hours. Calibration information is recorded through a data acquisition system (DAS). A neutral density filter test is performed quarterly as well as preventative maintenance items as prescribed by the manufacturer.
Monitoring Frequency	Opacity is monitored continuously.
Data Collection Procedures	Six-minute averages are recorded through the DAS.
Averaging Period	The averaging period for opacity observations is 10 consecutive 6-minute averages.

3.5 JUSTIFICATION

The No. 4 Recovery Boiler is subject to MACT II (40 CFR 63, Subpart MM) regulations, which requires compliance by March 2004. The MACT II regulations limit PM emissions from recovery boilers. PM is considered to be a surrogate for hazardous air pollutant (HAP) emissions. By March 2004, JSC will be required to comply with the PM emission limits established in the MACT II regulations, as well as associated monitoring and recordkeeping.

JSC proposes to comply with the MACT II requirements to satisfy CAM. Upon compliance with the MACT II standards, the No. 4 Recovery Boiler will be exempt from CAM requirements (see 40 CFR 64.2(b)(1)(i)), since relevant monitoring is included in the MACT II requirements.

Is COM Yet installed ?
If not certified VE Reader

The monitoring requirements contained in the MACT II rule for a recovery furnace equipped with an ESP include the installation, calibration, maintenance, and operation of a COMS that can be used to determine opacity at least once every successive 10-second period and calculate and record the

average opacity for each successive 6-minute period [40 CFR 63.864, Monitoring Requirements]. The regulations require corrective action to be taken whenever the average of ten consecutive 6-minute opacity readings exceeds 20 percent [40 CFR 63.864(c)(1)(i)].

OK(?) as long as this is an enforceable Permit Condition - Joel?

No, continues with CAM Plan MACT Requirements are presumptively acceptable. Compl with MACT assures Compl with SIP. Set CAM to MACT Level.

are CEMS in place? if not — certified VE Reader, need Indicator Range

4.0 PARTICULATE MATTER EMISSIONS FROM THE NO. 5 RECOVERY BOILER

4.1 EMISSIONS UNIT IDENTIFICATION

No. 5 Recovery Boiler—EU ID 011

4.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

The No. 5 Recovery Boiler has a PM emission limit of 0.044 gr/dscf at 8-percent O_2, 83.3 lb/hr, and 356.9 TPY [Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR 60.282(a)(1)(i)]. The current VE limit is 35-percent [Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR 60.282(a)(1)(ii)].

The PM emission limit that will apply to the No. 5 Recovery Boiler when the MACT II regulations (40 CFR 63, Subpart MM) take effect will also be 0.044 gr/dscf at 8-percent O_2 [40 CFR 63.862(a)(1)(i)(A)]. In addition, the opacity limit will be 35-percent, with a violation occurring if this level of opacity is exceeded for greater than 6 percent of the time during any calendar quarter [40 CFR 63.864(c)(2)(i)].

PM and VE compliance testing is required annually for the No. 5 Recovery Boiler. Additionally, a COMS is required to record the opacity of the stack flue gas. The COMS must be properly calibrated, operated, and maintained in accordance with Rule 62-297.520, F.A.C..

4.3 CONTROL TECHNOLOGY DESCRIPTION

PM emissions from the No. 5 Recovery Boiler are controlled by an ESP. The effectiveness of the ESP is evaluated with an annual stack test and continuous opacity measurements. A detailed description of the control equipment was included in the Title V renewal application (Attachment JSF-EU3-J3).

4.4 MONITORING APPROACH

The monitoring approach is based on the MACT II regulations (40 CFR 63, Subpart MM), as they apply to existing recovery boilers. The monitoring approach is presented in the following table.

	Indicator No. 1
Indicator	Opacity of ESP exhaust
Measurement Approach	COMS in ESP exhaust.
Indicator Range	Per MACT II requirements, an excursion is defined as the average of 10 consecutive 6-minute average opacity readings resulting in a measurement greater than 20-percent opacity. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.
Data Representativeness	Install the COMS at a representative location in the ESP exhaust.
Verification of Operational Status	NA
QA/QC Practices and Criteria	The COMS is automatically calibrated every 24 hours. Calibration information is recorded through a data acquisition system (DAS). A neutral density filter test is performed quarterly as well as preventative maintenance items as prescribed by the manufacturer.
Monitoring Frequency	Opacity is monitored continuously.
Data Collection Procedures	Six-minute averages are recorded through the DAS.
Averaging Period	The averaging period for opacity observations is 10 consecutive 6-minute averages.

4.5 JUSTIFICATION

The No. 5 Recovery Boiler is subject to MACT II (40 CFR 63, Subpart MM) regulations, which requires compliance by March 2004. The MACT II regulations limit PM emissions from recovery boilers. PM is considered to be a surrogate for HAP emissions. By March 2004, JSC will be required to comply with the PM emission limits established in the MACT II regulations, including associated monitoring and recordkeeping provisions.

JSC proposes to comply with the MACT II requirements to satisfy CAM. Upon compliance with the MACT II standards, the No. 5 Recovery Boiler will be exempt from CAM requirements (see 40 CFR 64.2(b)(1)(i)), since relevant monitoring is included in the MACT II requirements. For the MACT PM standard only R to - DC yet

The monitoring requirements contained in the MACT II rule for a recovery furnace equipped with an ESP include the installation, calibration, maintenance, and operation of a COMS that can be used to determine opacity at least once every successive 10-second period and calculate and record the

Is Coms Installed?

average opacity for each successive 6-minute period [40 CFR 63.864, Monitoring Requirements]. The regulations require corrective action to be taken whenever the average of ten consecutive 6-minute opacity readings exceeds 20 percent [40 CFR 63.864(c)(1)(i)].

PM Emissions From The No. 5 Smelt Dissolving Tank

Same comments as No. 4 Recovery Boiler. Submit approvable CAM Plan at this time.

TRS Emissions From The No. 5 Smelt Dissolving Tank

Are TRS emissions really greater than 100 TPY without controls? Based on what? If so, same comments as No. 4 Recovery Boiler. Submit approvable CAM Plan at this time.

PM Emissions From The No. 7 Power Boiler

Indicator ranges need re-evaluation and probable adjustment. Same comments as No. 5 Power Boiler. Amend CAM Plan at this time.

PM Emissions From The No. 4 Lime Kiln

Same comments as No. 4 Recovery Boiler. Submit approvable CAM Plan at this time.

TRS Emissions From The Pulping System

Does the pulping system itself have emissions limits? I understand that vapors collected from the pulping system are somehow ducted to the No. 4 Lime Kiln and the No. 5 Power Boiler, and that they each have emissions limitations, but that they do not have add-on controls for TRS reduction. I am not familiar with the pulping system MACT. Does it impose emission limits for TRS from the pulping system, or does it require the ducting of vapors to the lime kiln and power boiler as a "work practice" standard? If there are no specific emissions limits from the pulping system, then CAM does not apply to it. If there are specific emissions limits, are TRS emissions really greater than 100 TPY without controls? Based on what? If so, same comments as No. 4 Recovery Boiler. Submit approvable CAM Plan at this time.

After you get a chance to review these comments, please call me if you have any questions.

Request for Additional Information

Jefferson Smurfit Corporation
Title V Permit Renewal
Project Number: 0890003-009-AV

To: Rita Smith

From: Jonathan Holtom

Date: March 3, 2003

The following comments/questions are a result of my review of the submitted CAM plans for Jefferson Smurfit's Fernandina Beach Mill. These are mainly questions to you, but may be able to become part of your RAI questions if you can't, or don't have time, to provide the answers yourself. I did not pose them specifically as RAI questions because I did not know how they would blend with your other questions.

PM Emissions From The No. 5 Power Boiler (006) - Provide recent test data choose opacity or ESP Voltage

Please compare past successful PM compliance results to the associated COMS readings and/or concurrent Method 9 results. An indicator range of 30% VE would not appear to be protective of the PM standard if, under normal operations, "there will be very little VE from the ESP exhaust." Provide a correlation between actual PM emissions and representative actual VE readings. Indicator ranges should be sufficiently protective of the emissions standards in order to prevent excursions. Did Not Do

PM Emissions From The No. 4 Recovery Boiler (007)

Because this emissions unit is subject to a SIP limit for PM emissions, has potential uncontrolled emissions greater than 100 TPY, and because a control device is used to meet this limit, a CAM plan is required upon permit renewal. If the MACT limitations have been implemented through an air construction permit that imposes PM emissions limitations more restrictive than the old SIP limits, and if the AC permit limitations specifically supersede the old SIP limits, then the unit will be exempt from the CAM requirements with respect to PM emissions at the time it is in compliance with the MACT PM requirements. If the unit is currently in compliance with the MACT requirements, then CAM could be exempted now. However, their submission indicates that they will not be in compliance with the MACT requirements until March 2004. In that case, they must submit an approvable CAM plan to monitor compliance with the current SIP standard. If they can comply with the MACT monitoring requirements now, they may be able to avoid a permit revision next year. However, they must be in compliance with the CAM requirements upon issuance of this permit.

PM Emissions From The No. 5 Recovery Boiler (EU011)

Same comments as No. 4 Recovery Boiler. Submit approvable CAM Plan at this time.

PM Emissions From The No. 4 Smelt Dissolving Tank (013)

Same comments as No. 4 Recovery Boiler. Submit approvable CAM Plan at this time.

TRS Emissions From The No. 4 Smelt Dissolving Tank

Are TRS emissions really greater than 100 TPY without controls? Based on what? If so, same comments as No. 4 Recovery Boiler. Submit approvable CAM Plan at this time.

5.0 PARTICULATE MATTER EMISSIONS FROM THE NO. 4 SMELT DISSOLVING TANK

5.1 EMISSIONS UNIT IDENTIFICATION

No. 4 Smelt Dissolving Tank—EU ID No. 013

5.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

The No. 4 Smelt Dissolving Tank has a PM emission limit of 28.5 lb/hr and 124.83 TPY based on 56.568 lb smelt/hr, which is based on the maximum BLS fired in the No. 4 Recovery Boiler [Rule 62-296.320(4)(a)2., F.A.C.]. The current VE limit is 20-percent [Rule 62-296.404(2)(b), F.A.C.].

The PM emission limit for the No. 4 Smelt Dissolving Tank will be reduced by March 2004 when the MACT II regulations (40 CFR 63, Subpart MM) take effect. The new PM emission limit will be 0.20 lb/ton BLS [40 CFR 63.862(a)(1)(i)(B)].

A PM compliance test is required annually for the No. 4 Smelt Dissolving Tank.

5.3 CONTROL TECHNOLOGY DESCRIPTION

PM emissions from the No. 4 Smelt Dissolving Tank are controlled by a venturi scrubber. A detailed description of the scrubber was included in the Title V renewal application (Attachment JSF-EU4-J3).

5.4 MONITORING APPROACH

The monitoring approach is based on the MACT II regulations (40 CFR 63, Subpart MM), as they apply to existing smelt dissolving tanks. The monitoring approach is to use wet scrubber pressure drop and scrubbing liquid recirculation flow rate as the indicators for PM emissions. JSC has limited data correlating these parameters to PM emissions. The CAM rules, as described at 40 CFR 64.4(d) and (e), provide for an adequate amount of time to install and test necessary monitoring equipment, including the submission of a test plan and schedule to obtain performance data. JSC will conduct a testing program to determine indicator ranges. Initial testing will be completed within 90 days of issuance of the Title V permit approving the CAM monitoring approach. The results of the testing as

well as the selected indicator ranges will be submitted to the Department within 90 days of completion of the testing. The monitoring approach is summarized in the following table.

	Indicator No. 1	Indicator No. 2
Indicator	Pressure drop across the scrubber.	Scrubbing liquid (recirculation) flow rate.
Measurement Approach	Pressure drop is monitored with a differential pressure transducer.	The scrubbing liquid flow rate is measured using a flow rate sensor.
Indicator Range	An excursion is defined as any 3-hour average parameter value outside the range of values established during testing. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.	An excursion is defined as any 3-hour average parameter value is outside the range of values established during testing. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.
Data Representativeness	The monitoring system consists of a differential pressure transducer which measures the pressure drop across the scrubber. The minimum accuracy of the device is ±2 inches of water gauge pressure.	The scrubbing liquid flow rate sensor is located on the scrubber liquid recirculation line. The minimum accuracy of the device is ±5 percent of the design flow rate.
Verification of Operational Status	NA	NA
QA/QC Practices and Criteria	The pressure transducer is maintained in accordance with the manufacturers recommendations.	The flow rate sensor is maintained in accordance with the manufacturers recommendations.
Monitoring Frequency	Pressure drop is monitored continuously.	Scrubbing liquid flow rate is monitored continuously.
Data Collection Procedures	Hourly averages are computed from readings at least once every successive 15-minute period..	Hourly averages are computed from readings at least once every successive 15-minute period.
Averaging Period	3-hour averages are computed from the hourly averages.	3-hour averages are computed from the hourly averages.

5.5 JUSTIFICATION

The No. 4 Smelt Dissolving Tank is subject to MACT II (40 CFR 63, Subpart MM) regulations, which require compliance by March 2004. The MACT II regulations limit PM emissions from smelt dissolving tanks associated with a recovery furnace. PM is considered to be a surrogate for HAP emissions. By March 2004, JSC will be required to comply with the PM emission limits established in the MACT II regulations, as well as associated monitoring and recordkeeping.

JSC proposes to comply with the MACT II requirements to satisfy CAM. Upon compliance with the MACT II standards, the No. 4 Smelt Dissolving Tank will be exempt from CAM requirements [see 40 CFR 64.2(b)(1)(i)] since relevant monitoring is included in the MACT II requirements.

The monitoring requirements contained in the MACT II rule for a smelt dissolving tank equipped with a wet scrubber include the installation, calibration, maintenance, and operation of a continuous monitoring system that records the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period [40 CFR 63.864, Monitoring Requirements]. The regulations require corrective action to be taken whenever a 3-hour average parameter value is outside the indicator range [40 CFR 63.864(c)(1)(i)].

If equipment is in place, put MACT Conditions in Permit and make enforceable. ∴ Exempt from CAM Now.
Maybe Not. AC must Supercede SP.

6.0 TRS EMISSIONS FROM THE NO. 4 SMELT DISSOLVING TANK

6.1 EMISSIONS UNIT IDENTIFICATION

No. 4 Smelt Dissolving Tank—EU ID No. 013

6.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

The No. 4 Smelt Dissolving Tank has a TRS emission limit of 0.048 lb/3,000 lb BLS; 2.2 lb/hr; and 9.64 TPY [Rule 62-296.404(3)(d)1., F.A.C.]. The current VE limit is 20-percent [Rule 62-296.404(2)(b), F.A.C.].

A continuous monitor is required to be used to record the weak wash flow rate (12-hour average) to the scrubber, as a surrogate parameter for TRS control [Rule 62-296.404(5)(d), F.A.C.].

6.3 CONTROL TECHNOLOGY DESCRIPTION

TRS emissions from the No. 4 Smelt Dissolving Tank are controlled by a venturi scrubber. A detailed description of the scrubber was included in the Title V renewal application (Attachment JSF-EU4-J3).

6.4 MONITORING APPROACH

The monitoring approach is based on the current Title V permit.

exceedance of permit condition

	Indicator No. 1
Indicator	Scrubber weak wash flow rate.
Measurement Approach	The scrubber weak wash flow rate is measured using a flow rate sensor.
Indicator Range	An excursion is defined as when any 12-hour average parameter value is less than 68 gpm. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.
Data Representativeness	The scrubber weak wash flow rate sensor is located on the scrubber liquid supply line.
Verification of Operational Status	NA
QA/QC Practices and Criteria	The flow rate sensor is maintained in accordance with the manufacturers recommendations.
Monitoring Frequency	Scrubbing liquid flow rate is monitored continuously.
Data Collection Procedures	Hourly averages are computed from readings at least once every successive 15-minute period.
Averaging Period	12-hour averages are computed from the hourly averages.

By Permit?

6.5 JUSTIFICATION

The current Title V permit contains monitoring requirements for the TRS surrogate parameter—weak wash flow rate to the scrubber. JSC's proposed CAM plan is to continue to comply with the monitoring of scrubber parameters, as required by the Title V permit.

Is 64 gpm Protective of emission limit ?

7.0 PARTICULATE MATTER EMISSIONS FROM THE NO. 5 SMELT DISSOLVING TANK

Subp. BB (pre 1990) PM & TRS

7.1 EMISSIONS UNIT IDENTIFICATION

No. 5 Smelt Dissolving Tank—EU ID No. 014

7.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

BB

The No. 5 Smelt Dissolving Tank has a PM emission limit of 0.2 lb/ton BLS, 15.68 lb/hr, and 67.17 TPY [Rule 62-204.800(8)(b)35., F.A.C.]. The current VE limit is 20-percent [Rule 62-296.404(2)(b), F.A.C.].

The PM emission limit that will apply to the No. 5 Smelt Dissolving Tank when the MACT II regulations (40 CFR 63, Subpart MM) take effect will continue to be 0.20 lb/ton BLS (40 CFR 63.862(a)(1)(i)(B)].

A PM compliance test is required annually for the No. 5 Smelt Dissolving Tank. A continuous monitor is required to be used to record the scrubber liquid supply pressure and pressure loss of the gas stream [Rules 62-204.800(8)(b)35., F.A.C.; and 40 CFR 60.284(b)(2)]. BB

7.3 CONTROL TECHNOLOGY DESCRIPTION

PM emissions from the No. 5 Smelt Dissolving Tank are controlled by a venturi scrubber. A detailed description of the control equipment was included in the Title V renewal application (Attachment JSF-EU5-J3).

7.4 MONITORING APPROACH

The monitoring approach is based on the MACT II regulations (40 CFR 63, Subpart MM), as they apply to existing smelt dissolving tanks. The monitoring approach is to use pressure drop across the scrubber and scrubbing liquid recirculation flow rate as the indicators for PM emissions. JSC has limited data correlating these parameters to PM emissions. The CAM rules, as described at 40 CFR 64.4(d) and (e), provide for an adequate amount of time to install and test necessary monitoring equipment, including the submission of a test plan and schedule to obtain performance data. JSC will conduct a testing program to determine indicator ranges. Initial testing will be completed within 90 days of issuance of the Title V permit with an approved CAM monitoring approach. The results

NO!

of the testing as well as the selected indicator ranges will be submitted to the Department within 90 days of completion of the testing. The monitoring approach is summarized in the following table.

	Indicator No. 1	**Indicator No. 2**
Indicator	Pressure drop across the scrubber.	Scrubbing liquid (recirculation) flow rate.
Measurement Approach	Pressure drop is monitored with a differential pressure transducer.	The scrubbing liquid flow rate is measured using a flow rate sensor.
Indicator Range	An excursion is defined as any 3-hour average parameter value outside the range of values established during the testing. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.	An excursion is defined as any 3-hour average parameter value outside the range of values established during the testing. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.
Data Representativeness	The monitoring system consists of a differential pressure transducer which measures the pressure drop across the scrubber. The minimum accuracy of the device is ±2 inches of water gauge pressure.	The scrubbing liquid flow rate sensor is located on the scrubber liquid recirculation line. The minimum accuracy of the device is ±5 percent of the design flow rate.
Verification of Operational Status	NA	NA
QA/QC Practices and Criteria	The pressure transducer is maintained in accordance with the manufacturers recommendations..	The flow rate sensor is maintained in accordance with the manufacturers recommendations.
Monitoring Frequency	Pressure drop is monitored continuously.	Scrubbing liquid flow rate is monitored continuously.
Data Collection Procedures	Hourly averages are computed from readings at least once every successive 15-minute period.	Hourly averages are computed from readings at least once every successive 15-minute period.
Averaging Period	3-hour averages are computed from the hourly averages.	3-hour averages are computed from the hourly averages.

7.5 JUSTIFICATION

The No. 5 Smelt Dissolving Tank is subject to MACT II (40 CFR 63, Subpart MM) regulations, which requires compliance by March 2004. The MACT II regulations limit PM emissions from smelt dissolving tanks associated with a recovery furnace. PM is considered to be a surrogate for HAP emissions. By March 2004, JSC will be required to comply with the PM emission limits established in the MACT II regulations, as well as associated monitoring and recordkeeping.

JSC proposes to comply with the MACT II requirements to satisfy CAM. Upon compliance with the MACT II standards, the No. 5 Smelt Dissolving Tank will be exempt from CAM requirements [see 40 CFR 64.2(b)(1)(i)] since relevant monitoring is included in the MACT II requirements.

The monitoring requirements contained in the MACT II rule for a smelt dissolving tank equipped with a wet scrubber include the installation, calibration, maintenance, and operation of a continuous monitoring system that records the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period [40 CFR 63.864, Monitoring Requirements]. The regulations require corrective action to be taken whenever a 3-hour average parameter value is outside the indicator range [40 CFR 63.864(c)(1)(i)].

8.0 TRS EMISSIONS FROM THE NO. 5 SMELT DISSOLVING TANK

8.1 EMISSIONS UNIT IDENTIFICATION

No. 5 Smelt Dissolving Tank—EU ID No. 014

8.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

The No. 5 Smelt Dissolving Tank has a TRS emission limit of 0.033 lb/ton BLS, 2.59 lb/hr and 11.08 TPY [Rules 62-204.800(8)(b)35., F.A.C.; and 40 CFR 60.283(a)(4)]. The current VE limit is 20-percent [Rule 62-296.404(2)(b), F.A.C.].

A continuous monitor is used to record the weak wash flow rate to the scrubber, as a surrogate parameter for TRS control [Rule 62-296.404(5)(d), F.A.C.].

8.3 CONTROL TECHNOLOGY DESCRIPTION

TRS emissions from the No. 5 Smelt Dissolving Tank are controlled by a venturi scrubber. A detailed description of the control equipment was included in the Title V renewal application (Attachment JSF-EU5-J3).

8.4 MONITORING APPROACH

	Indicator No. 1
Indicator	Scrubber weak wash flow rate.
Measurement Approach	The scrubber weak wash flow rate is measured using a flow rate sensor.
Indicator Range	An excursion is defined as when any 12-hour average parameter value is less than 75 gpm. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.
Data Representativeness	The scrubber weak wash flow rate sensor is located on the scrubber liquid supply line.
Verification of Operational Status	NA
QA/QC Practices and Criteria	The flow rate sensor is maintained in accordance with the manufacturers recommendations.
Monitoring Frequency	Scrubbing liquid flow rate is monitored continuously.
Data Collection Procedures	Hourly averages are computed from readings at least once every successive 15-minute period.
Averaging Period	12-hour averages are computed from the hourly averages.

8.5 JUSTIFICATION

JSC currently monitors scrubber weak wash flow rate to comply with the TRS rule. JSC's proposed CAM plan for TRS is to continue to monitor scrubber weak wash flow rate as required by the TRS rule.

9.0 PARTICULATE MATTER EMISSIONS FROM THE NO. 7 POWER BOILER

9.1 EMISSIONS UNIT IDENTIFICATION

No. 7 Power Boiler—EU ID No. 015

9.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

The No. 7 Power Boiler has a PM emission limit of 0.1 lb/MMBtu, 102.1 lb/hr, and 447.2 TPY [Rule 62-204.800(8)(b)1, F.A.C.; 40 CFR 60.42(a)(1)]. The current VE limit is 20-percent, except up to 27-percent is allowed for up to 6 minutes per hour [Rules 62-204.800(8)(b)1, F.A.C.; and 40 CFR 60.42(a)(1) and (2)].

PM and VE compliance tests are required annually for the No. 7 Power Boiler. Additionally, a COMS is required to record the opacity of the stack flue gas. The COMS must be calibrated, operated, and maintained in accordance with Rule 62-297.520, F.A.C.

9.3 CONTROL TECHNOLOGY DESCRIPTION

PM emissions from the No. 7 Power Boiler are controlled by an ESP. The effectiveness of the ESP is evaluated with an annual stack test and continuous opacity measurements. A detailed description of the control equipment was included in the Title V renewal application (Attachment JSF-EU6-J3).

9.4 MONITORING APPROACH

The monitoring approach is to use either opacity (Option A) or ESP power (Option B) as the indicator of PM emissions. JSC has limited data correlating these parameters to PM emissions. The CAM rules, as described at 40 CFR 64.4(d) and (e), provide for an adequate amount of time to install and test necessary monitoring equipment, including the submission of a test plan and schedule to obtain performance data. JSC will conduct a testing program to determine which indicator parameter provides a more representative indicator of actual PM emissions. Initial testing will be completed within 90 days of issuance of the Title V operating permit with an approved CAM monitoring approach. The results of the testing as well as the selected indicator parameter and parameter ranges will be submitted to the Department within 90 days of completion of the testing. The monitoring approach is summarized in the following table.

NO! Need Something NOW

	Option A--Indicator No. 1	*Option B*--Indicator No. 1
Indicator	Opacity of ESP exhaust.	ESP secondary voltage and current are measured for each field to determine the total power to the ESP.
Measurement Approach	COMS in ESP exhaust.	The secondary voltage is measured using a voltmeter and the secondary current is measured using an ammeter. The total power (P expressed as kW) input to the ESP is the sum of the products of the secondary voltage (V) and current (I) in each field. ($P = V_1I_1 + V_2I_2 + \ldots + V_nI_n$)
Indicator Range	The opacity indicator range will be established at or below an opacity level where the ESP has demonstrated at least a 10 percent margin of compliance with the PM limit. An hourly average opacity value is selected to prevent momentary process perturbations from causing an excursion. When the average 1-hour opacity is outside the indicator range, an inspection, corrective action, and recordkeeping and reporting are triggered.	An excursion is defined as an ESP power input less than a minimum kW (to be determined). Excursions trigger an inspection, corrective action, and a reporting requirement.
Data Representativeness	Install the COMS at a representative location in the ESP exhaust.	The voltage and current are measured using standard instrumentation provided for this purpose.
Verification of Operational Status	NA	NA
QA/QC Practices and Criteria	The COMS automatically calibrates every 24 hours. Calibration information is recorded through a data acquisition system (DAS). A neutral density filter test is performed quarterly as well as preventative maintenance items as prescribed by the manufacturer.	Confirm the meters read zero when the unit is not operating.
Monitoring Frequency	Monitor the opacity of the ESP exhaust continuously.	The secondary voltage and current are measured continuously and used to calculate the power input every 15 minutes.
Data Collection Procedures	The DAS retains all 6-minute and hourly average opacity data.	The hourly average power input is calculated and recorded.
Averaging Period	1-hour block average. Use the 10-second opacity data to calculate the hourly block average opacity.	1-hour block averaging period.

9.5 JUSTIFICATION

JSC is proposing to monitor either opacity or total ESP power, depending on which indicator provides the best correlation with PM emissions. The correlation will be determined through a testing program.

ESP parameters are generally recognized indicators of PM emissions. Lower opacity is generally indicative of good operation and maintenance of the ESP. PM emissions generally increase with increasing opacity.

In an ESP, electric fields are established by applying a direct-current voltage across a pair of electrodes, a discharge electrode and a collection electrode. Particulate matter suspended in the gas stream is electrically charged by passing through the electric field around each discharge electrode (the negatively charged electrode). The negatively charged particles then migrate toward the positively charged collection electrodes. The particulate matter is separated from the gas stream by retention on the collection electrode. Particulate is removed from the collection plates by shaking or rapping the plates.

Generally, ESP performance improves as total power input increases. This relationship holds true when PM and gas stream properties (such as PM concentration, size distribution, resistivity, and gas flow rate) remain stable and all equipment components (such as rappers, plates, wires, hoppers, and transformer-rectifiers) operate satisfactorily.

The secondary voltage drops when a malfunction, such as ground electrodes, occurs in the ESP. When the secondary voltage drops, less particulate is charged and collected. Also, the secondary voltage can remain high but fail to perform its function if the collection plates are not cleaned, or rapped, appropriately. If the collection plates are not cleaned, the current drops. Thus, since the power is the product of the voltage and the current, monitoring the power input will provide a reasonable assurance that the ESP is functioning properly. Problems that may not be detected by monitoring other parameters individually will be manifested in the total power input.

The ~~indicator~~ ranges will be determined through a testing program. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence, to determine the action required (if any) to correct the situation. All excursions will be documented and reported.

Need Ranges NOW.

10.0 PARTICULATE MATTER EMISSIONS FROM THE NO. 4 LIME KILN

10.1 EMISSIONS UNIT IDENTIFICATION

No. 4 Lime Kiln—EU ID No. 021

10.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

The No. 4 Lime Kiln has a PM emission limit of 0.13 gr/dscf at 10-percent O_2, 43.5 lb/hr, and 190.0 TPY [Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR 282(a)(3)(ii)]. The current VE limit is 20-percent [Rule 62-296.320(4)(b)1, F.A.C.].

The PM emission limit for the No. 4 Lime Kiln will be reduced by March 2004 when the MACT II regulations (40 CFR 63, Subpart MM) take effect. The new PM emission limit will be 0.064 gr/dscf @ 10-percent O_2 [40 CFR 63.862(a)(1)(i)(C)]. In addition, the new opacity limit will be 20 percent, with a violation occurring if this level of opacity is exceeded for greater than 6-percent of the time during any calendar quarter [40 CFR 63.864(c)(2)(ii)].

PM and VE compliance testing is required annually for the No. 4 Lime Kiln.

10.3 CONTROL TECHNOLOGY DESCRIPTION

PM emissions from the No. 4 Lime Kiln are controlled by an ESP. A detailed description of the control equipment was included in the Title V renewal application (Attachment JSF-EU8-J11).

10.4 MONITORING APPROACH

The monitoring approach is based on the MACT II regulations (40 CFR 63, Subpart MM), as they apply to existing lime kilns. The monitoring approach is presented in the following table.

why not ESP power, also?

	Indicator No. 1
Indicator	Opacity of ESP exhaust.
Measurement Approach	COMS in ESP exhaust.
Indicator Range	Per MACT II requirements, an excursion is defined as the average of 10 consecutive 6-minute average opacity readings resulting in a measurement greater than 20-percent opacity. Excursions trigger an inspection, corrective action, and a recordkeeping and reporting requirement.
Data Representativeness	Install the COMS at a representative location in the ESP exhaust
Verification of Operational Status	NA
QA/QC Practices and Criteria	The COMS is automatically calibrated every 24 hours. Calibration information is recorded through a data acquisition system (DAS). A neutral density filter test is performed quarterly as well as preventative maintenance items as prescribed by the manufacturer.
Monitoring Frequency	Opacity is monitored continuously.
Data Collection Procedures	Six-minute averages are recorded through the DAS.
Averaging Period	The averaging period for opacity observations is 10 consecutive 6-minute averages.

not yet installed?

obs

10.5 JUSTIFICATION

The No. 4 Lime Kiln is subject to MACT II (40 CFR 63, Subpart MM) regulations, which requires compliance by March 2004. The MACT II regulations limit PM emissions from lime kilns. PM is considered to be a surrogate for hazardous air pollutant (HAP) emissions. By March 2004, JSC will be required to comply with the PM emission limits established in the MACT II regulations, as well as associated monitoring and recordkeeping.

JSC proposes to comply with the MACT II requirements to satisfy CAM. Upon compliance with the MACT II standards, the No. 4 Lime Kiln will be exempt from CAM requirements (see 40 CFR 64.2(b)(1)(i)), since relevant monitoring is included in the MACT II requirements.

Not quite maybe

The monitoring requirements contained in the MACT II rule for a lime kiln equipped with an ESP include the installation, calibration, maintenance, and operation of a COMS that can be used to determine opacity at least once every successive 10-second period and calculate and record the average opacity for each successive 6-minute period [40 CFR 63.864, Monitoring Requirements].

appears that it is not yet installed

The regulations require corrective action to be taken whenever the average of ten consecutive 6-minute opacity readings exceeds 20 percent [40 CFR 63.864(c)(1)(i)].

11.0 TRS EMISSIONS FROM THE PULPING SYSTEM—MACT I

11.1 EMISSIONS UNIT IDENTIFICATION

Pulping System-MACT I—EU ID No. 033

11.2 APPLICABLE REGULATIONS, EMISSIONS LIMITS, AND MONITORING REQUIREMENTS

TRS emissions from the Pulping System-MACT I are controlled in the No. 4 Lime Kiln and the No. 5 Power Boiler. The No. 4 Lime Kiln has a TRS emission limit of 8 ppmvd @ 10-percent O_2, 2.63 lb/hr, and 11.5 TPY [Rules 62-204.800(8)35., F.A.C.; and 40 CFR 60.283(a)(5)]. The No. 5 Power Boiler has a TRS emission limit of 5 ppmvd @ 10-percent O_2 (12-hour average), 11.74 lb/hr, and 12.85 TPY [Rule 62-296.404(3)(f)].

A TRS compliance test is required annually for the No. 4 Lime Kiln. Additionally, a continuous monitoring device for TRS is required for the No. 4 Lime Kiln [Rules 62-204.800(8)(b)34., F.A.C.; and 40 CFR 60.284(a)(2)].

Compliance with the TRS limit for the No. 5 Power Boiler is achieved by maintaining the minimum temperature of 1200°F and the 0.5-second residence time [Rules 62-296.404(3)(a)1., F.A.C.; and 40 CFR 60.283(a)(1)(iii)]. However, no specific monitoring is required under Rule 62-296, F. A. C., to comply with this requirement.

11.3 CONTROL TECHNOLOGY DESCRIPTION

TRS emissions are combusted in the No. 4 Lime Kiln (primary control device) and the No. 5 Power Boiler (secondary control device).

11.4 MONITORING APPROACH/JUSTIFICATION

The Pulping System-MACT I is subject to MACT I (40 CFR 63, Subpart S) regulations. The MACT I regulations limit HAP emissions from pulping processes. Although the MACT I standards only regulate HAP emissions, the TRS emissions are contained in the same gas stream and are therefore controlled in the same manner. Since both HAP and TRS emissions are controlled by the No. 4 Lime Kiln and the No. 5 Power Boiler, and the HAP emissions are regulated by the MACT I standards, the proposed CAM plan for TRS is to comply with the MACT I regulations.

The monitoring requirements contained in the MACT I rule for pulping processes include monitoring of the closed vent system for transporting the HAP gases to the combustion device. The rules also require that the HAP emission stream be introduced with the primary fuel or the into the flame zone of the combustion device.

ATTACHMENT A

SIGNATURE PAGES

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   Warren S. Flenniken, V.P. and General Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: **Jefferson Smurfit Corp. (U.S.), Mill Div.**
   Street Address: **North 8th Street**
   City: **Fernandina Beach** State: **FL** Zip Code: **32034**
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: (**904**) **261 - 5551** Fax: (**904**) **277 - 5888**
4. Owner/Authorized Representative or Responsible Official Statement:

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

   W. S. Flenniken — Signature

   06/11/03 — 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 [X], 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 [ ], 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.

David A. Buff
Signature

6/12/03
Date

(seal)

* Attach any exception to certification statement.

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Jonathan Holtom
2. DAQM - MS 5505
3.
4.
5.

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

X DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

____ FOR YOUR INFORMATION

X HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

X FOR YOUR FILES

COMMENTS:

CAM Plan for GP Hawthorne Plywood Plant. Response to a RAI - 30 Days

RECEIVED

MAR 27 2003

BUREAU OF AIR REGULATION

FROM: Frank Alvarez DATE: 3/21/03 PHONE: SC 804-3243

DEP 15-026 (12/93)

Georgia-Pacific Corporation

SouthEastern Regional Environmental Office
752 Blanding Blvd,
Suite 123
Orange Park, FL 32065
Telephone 904-298-1116
Fax 404-749-2750

Christopher L. Kirts, P.E.
District Air Program Administrator
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, FL 32256-7590

March 18, 2003

RE: Georgia-Pacific Corporation
Hawthorne Plywood Plant
Title V Permit No: 1070015-001-AV
TITLE V UPDATE

Dear Mr. Kirts:

Attached is an update to the Title V application for the Georgia-Pacific Corporation Hawthorne Plywood facility. The application, process flow diagram, CAM plans and calculations are attached. Please call me at 904-298-1116 if you have any questions.

Sincerely,

Margarete M. Vest, P.E.
Regional Environmental Engineer

Attachments: Permit Application

cc: Marty Shorey
Dick Byrd
Paul Vasquez
Tammy Wyles

Department of Environmental Protection

Division of Air Resources Management

RECEIVED
MAR 27 2003
BUREAU OF AIR REGULATION

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: Georgia-Pacific Corporation Hawthorne Plywood Mill	
3. Facility Identification Number: 1070015-001-AV	[ ] Unknown
4. Facility Location: Street Address or Other Locator: 223 Gordon Chapel Rd City:Hawthorne County:Putnam Zip Code:32640	
5. Relocatable Facility? [ ] Yes [x] No	6. Existing Permitted Facility? [x] Yes [ ] No

Application Contact

1. Name and Title of Application Contact:Margarete M. Vest, Regional Environmental Engr
2. Application Contact Mailing Address: Organization/Firm:Georgia-Pacific Corporation Street Address: 752 Blanding Blvd, Suite 123 City:Orange Park State:Fl Zip Code:32065
3. Application Contact Telephone Numbers: Telephone: (904)298-1116 Fax: (404)749 -2750

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

RECEIVED
MAR 20 2003

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

Purpose of Application

Air Operation Permit Application

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

[X] Title V air operation permit **renewal** 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:
   Martin Shorey, Plant Manager

2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: Georgia-Pacific Corporation
   Street Address: 223 Gordon Chapel Rd
   City: HawthorneState:Fl Zip Code:32640

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: (352) 481-4311 Fax: (352)481 -4915

4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative(check here [x], if so) or the responsible official (check here [ ], 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.*

   Mart Shorey 3/6/03

   Signature Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Margarete M. Vest
   Registration Number: 42794

2. Professional Engineer Mailing Address:
   Organization/Firm:Georgia-Pacific Corporation
   Street Address:752 Blanding Blvd, Suite 123
   City:Orange Park State:Fl Zip Code:32065

3. Professional Engineer Telephone Numbers:
   Telephone: (904)298 -1116 Fax: (404)-749-2750

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 renew a Title V source air operation permit (check here [x], 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 [ ], 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 3/18/03 (seal) Date 3/18/03

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	Wood Waste Fired Boiler		na
002	Skinner Saw System & Glue Line System		na
003	Sanding System		na
004	#1,2,3 Plywood presses		na
005	#1,2,3 Veneer Dryers		na

Application Processing Fee

Check one: [ ] Attached - Amount: $_____ [x] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Title V Renewal

2. Projected or Actual Date of Commencement of Construction.

3. Projected Date of Completion of Construction:

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone:17 East (km):399.50 North (km):3273.80			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS):29/35/30 Longitude (DD/MM/SS):82/02/15			
3. Governmental Facility Code: Private O	4. Facility Status Code: A	5. Facility Major Group SIC Code: 24	6. Facility SIC(s): 2436
7. Facility Comment (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: Johnnie Temples, Environmental Coordinator
2. Facility Contact Mailing Address: Organization/Firm: Georgia-Pacific Corporation Street Address: 223 Gordon Chapel Rd City:Hawthorne State:Fl Zip Code:32640
3. Facility Contact Telephone Numbers: Telephone: (352-481-4311- Fax: (352) -481-4915

Facility Regulatory Classifications

Check all that apply:

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

List of Applicable Regulations

Title V Core List	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
PM	A				
PM 10	A				
VOC	A				
CO	A				
NOx	A				
H106-hydrogen chloride	A				
H115-methanol	A				
HAPS	A				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

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

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [x] Attached, Document ID: _E [ ] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID:_____
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [x] Not Applicable

10. Alternative Methods of Operation:
    [ ] Attached, Document ID:_____ [x] Not Applicable

11. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID:_____ [x] Not Applicable

12. Identification of Additional Applicable Requirements:
    []Attached, Document ID:_____ [x] Not Applicable

13. Risk Management Plan Verification:
    [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [x] Not Applicable

14. Compliance Report and Plan:
    [] Attached, Document ID:____ [x] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [x] Attached, Document ID: Application pg. 3. [] 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-Boiler- EU001

1. Type of Emissions Unit Addressed in This Section: (Check one)

[x] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] 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.

[ ] 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)

[x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] 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):Boiler with multi-clone and ESP

4. Emissions Unit Identification Number: [ ] No ID
ID: 001 [ ] ID

5. Emissions Unit Status Code:A	6. Initial Startup Date:Jul 1, 1982	7. Emissions Unit Major Group SIC Code:24	8. Acid Rain Unit? [x]NO

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):
Electrostatic Precipitator

2. Control Device or Method Code(s):010

Emissions Unit Details

1. Package Unit:
Manufacturer:Zurn Industries — Model Number:SN#99929

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: 224 mmBtu/hr
2. Maximum Incineration Rate: lb/hr tons/day
3. Maximum Process or Throughput Rate: 220,476 tons/yr of green fuel
4. Maximum Production Rate:
5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):Max throughput is based on green fuel based on 224 mmbtu/hr rate and 8760 hrs/yr. Unit also uses dry wood waste, less than 500 lbs of glue wood waste, and a pilot burner uses propane.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Core Title V regulations	

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

Emission Point Description and Type-boiler

1. Identification of Point on Plot Plan or Flow Diagram? EP 1	2. Emission Point Type Code: 1
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Single vertical stack of the ESP.	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: 001-boiler with multi-clone	

5. Discharge Type Code:V	6. Stack Height: 110 feet	7. Exit Diameter: 6 feet
8. Exit Temperature: 340°F	9. Actual Volumetric Flow Rate: 77,000acfm	10. Water Vapor: 13 %

11. Maximum Dry Standard Flow Rate: 44000 dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates: Zone:17 East (km):399.460 North (km):3273.790	
14. Emission Point Comment (limit to 200 characters):	

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): Wood/ Bark fired boiler.		
2. Source Classification Code (SCC): 1-01-009-02	3. SCC Units: tons burned	
4. Maximum Hourly Rate: 25.20	5. Maximum Annual Rate: 220476	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:8.9 mmbtu/ton
10. Segment Comment (limit to 200 characters): Maximum of 500 lbs/week of glue waste from the plant's process and propane for a pilot light is also included in this fuel.		

Segment Description and Rate: Segment

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate: 60	5. Maximum Annual Rate;	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash: 0.65	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Permit Request		

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	**077**	**010**	**EL**
PM10	**077**	**010**	**NS**
CO			**NS**
Nox			**NS**
Hydrogen Chloride-H106			**NS**
Total HAPS			**NS**
Methanol- H115			**NS**
VOC			**NS**

Emissions Unit Information Section ___001__ of _____

Pollutant Detail Information Page _____ of _____

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: 98
3. Potential Emissions: 33.6 lb/hour 146 tons/year	4. Synthetically Limited? no
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.15 lb/mmbtu Reference: Proposed BACT in ACP ; 8-23-79	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.15 lb/ mmbtu x 224 lb/mmbtu/ hr = 33.6 lb/hr 33.6 x 24 hrs/day x 7 days/week x 52 weeks/year /2000 = 146.76 tpy	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section ___001__ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-boiler

1. Pollutant Emitted: Hydrogen chloride-H106	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 4.26 lb/hour 18.6 tons/year	4. Synthetically Limited? no
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.019 lb/mmbtu Reference: AP-42	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): 0.019 lb/ mmbtu x 224 lb/mmbtu/ hr = 4.26 lb/hr 4.26 x 8760 hr/yr /2000 = 18.6 tpy	
10. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section ___001__ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-boiler

1. Pollutant Emitted: H 115-methanol	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 0.314 lb/hour 1.37 tons/year	4. Synthetically Limited? no
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.0014 lb/mmbtu Reference: COMPILATION OF 'AIR TOXIC' AND TOTAL HYDROCARBON EMISSIONS DATA FOR SOURCES AT CHEMICAL WOOD PULP MILLS VOLUME 1 - TECHNICAL BULLETIN NO. 701; OCTOBER 1995 Table 19A - Summary of "Air Toxic" Emissions from Wood-Fired Boilers, page 252	7. Emissions Method Code: 4
8. Calculation of Emissions (limit to 600 characters): 0.0014 lb/ mmbtu x 224 lb/mmbtu/ hr = 0.314 lb/hr x 8760 hr/yr /2000 = 1.37 tpy	
11. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section ___001__ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-boiler

1. Pollutant Emitted: HAPS	2. Total Percent Efficiency of Control: 0
3. Potential Emissions: 9 lb/hour 39.3 tons/year	4. Synthetically Limited? no
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.04 lb/mmbtu Reference: AP-42	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): 0.04 lb/ mmbtu x 224 lb/mmbtu/ hr = 9 lb/hr x 8760 hr/yr /2000 = 39.3 tpy	
12. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section ___001__ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-boiler

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 134 lb/hour 589 tons/year	4. Synthetically Limited? no
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.6 lb/mmbtu Reference: AP-42	7. Emissions Method Code: 4
8. Calculation of Emissions (limit to 600 characters): 0.6 lb/ mmbtu x 224 lb/mmbtu/ hr = 134 lb/hr x 8760 hr/yr /2000 = 589 tpy	
13. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section ___001__ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-boiler

1. Pollutant Emitted: voc	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 2.9 lb/hour 12.8 tons/year	4. Synthetically Limited? no
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.013 lb/mmbtu Reference: ap-42	7. Emissions Method Code: 4
8. Calculation of Emissions (limit to 600 characters): 0.013 lb/ mmbtu x 224 lb/mmbtu/ hr = 2.9 lb/hr x 8760 hr/yr /2000 = 12.8 tpy	
14. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section ___001__ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-boiler

1. Pollutant Emitted: Nox	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 49.3 lb/hour 216 tons/year	4. Synthetically Limited? no
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.22 lb/mmbtu Reference: AP-42	7. Emissions Method Code: 4
8. Calculation of Emissions (limit to 600 characters): 0.22 lb/ mmbtu x 224 lb/mmbtu/ hr = 49.3 lb/hr x 8760 hr/yr /2000 = 216 tpy	
15. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

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: VE30	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 30% Exceptional Conditions: 40% Maximum Period of Excess Opacity Allowed: 2 min/hour	
4. Method of Compliance: EPA Method 9 test	
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 _na_ of __

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram [x] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [] Attached, Document ID:___ [ ] Not Applicable [x] Waiver Requested
3. Detailed Description of Control Equipment; will be in CAM [ ] Attached, Document ID:____ [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [x] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [x] Previously submitted, Date: _May 2002_____ [ ] Not Applicable
6. Procedures for Startup and Shutdown; will be in CAM [ ] Attached, Document ID:_____ [] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan: In CAM [ ] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [x] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [ ] Not Applicable
10. Supplemental Requirements Comment:

II. 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-002 Skinner Saw System & Glue Line System

1. Type of Emissions Unit Addressed in This Section: (Check one)

[] 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).

[x] 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.

[ ] 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)

[x]The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] 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): Skinner saw system and glue line saw units

4. Emissions Unit Identification Number: [ ] No ID
ID: 002 [ ] ID Unkn

5. Emissions Unit Status Code:A	6. Initial Startup Date:07-82	7. Emissions Unit Major Group SIC Code:24	8. Acid Rain Unit? [ ]no

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): high efficiency cyclone-

2. Control Device or Method Code(s):007

Emissions Unit Details

1. Package Unit: Manufacturer: Engineering Sheet Metal	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-002

1. Maximum Heat Input Rate:	mmBtu/hr	
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate: 441504 msf/yr		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Core list	

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

Emission Point Description and Type-EU 002- Skinner Saw System EP -5A

1. Identification of Point on Plot Plan or Flow Diagram? EP –05 A	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Two cyclones; one for transferring sawdust/ waste from the skinner saw system (5A) and a second cyclone for transferring sawdust/wood waste from the glue line sawing units (5B) which is detailed in the following section D.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: EU-002 -		
5. Discharge Type Code:v	6. Stack Height: 50feet	7. Exit Diameter: 3.4 feet
8. Exit Temperature: 68°F	9. Actual Volumetric Flow Rate: 41940 acfm	10. Water Vapor: 1.5%
11. Maximum Dry Standard Flow Rate: 38505 dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone:17 East (km):399.540 North (km):3273.780		
14. Emission Point Comment (limit to 200 characters): Airflow and vapor based on highest of 3 runs for Method 5 FDEP compliance test done on 6/7/99 by ACE Consultants..		

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

Emission Point Description and Type-002- Glue Line System 5B

1. Identification of Point on Plot Plan or Flow Diagram? EP –05 B	2. Emission Point Type Code: 1

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Two cyclones; one for transferring sawdust/ waste from the skinner saw system (5A) and a **second cyclone for transferring sawdust/wood waste from the glue line sawing units (5B).**

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: EU-002 -

5. Discharge Type Code:v	6. Stack Height: 50 feet	7. Exit Diameter: 3.4 feet
8. Exit Temperature: 68°F	9. Actual Volumetric Flow Rate: 15792 acfm	10. Water Vapor: 2.6 %

11. Maximum Dry Standard Flow Rate: 14302 dscfm	12. Nonstack Emission Point Height: feet

13. Emission Point UTM Coordinates:

Zone:17 East (km):399.540 North (km):3273.780

14. Emission Point Comment (limit to 200 characters):

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

Segment Description and Rate: Segment __1___ of __1___ for EU 002

1. Segment Description (Process/Fuel Type) (limit to 500 characters): *Softwood Plywood, Saws, Hog, and Sander*		
2. Source Classification Code (SCC): 30700793	3. SCC Units: 1000 sf	
4. Maximum Hourly Rate:73	5. Maximum Annual Rate: 441,504	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

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
(EU 002)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**007**		**EL**
VOC	**None**		**NS**
H115 Methanol	**none**		**ns**

Emissions Unit Information Section _____ **of** _____

Pollutant Detail Information Page _____ **of** _____

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

Potential/Fugitive Emissions-002- 5A

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99%
3. Potential Emissions: 11.7 lb/hour 51.20 tons/year (5120 TPY Potential)	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: (Uncontrolled) [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: Permit limit established in the past permitting.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-002- 5A

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:0
3. Potenti al Emissions: 6.3 lb/hour 19 tons/year	4. Synthetically Limited? [n
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor:0.086 lb/ Msf Reference: AP-42 Table 10.5-7, 1/02	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): 73.2 msf/hr x .086 lb/msf = 6.3 lb/hrs 441,504 Msf/yr x .086 lb/msf/2000 lbs/ton = 19 tons/year.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-002- 5A- skinner saw cyclone

1. Pollutant Emitted: H115	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 0.88 lb/hour 2.65 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor:0.012 LB / MSF Reference: AP-42 Table 10.5-7, 1/02	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): 73.2 msf/hr x 0.012 LB / MSF= .88 lb/hrs 441,504 Msf/yr x 0.012 LB / MSF /2000 lbs/ton = 2.65 tons/year.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-002- 5B- Glue line cyclone

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:99.9
3. Potenti`al Emissions: 1.2 lb/hour 5.4 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor:0.01GR/SCF Reference: TEST DONE ON CYCLONE FOR DEP BY ACE, 12/9/94	7. Emissions Method Code:1
8. Calculation of Emissions (limit to 600 characters): 14300 * .01*60 MIN/HR/7000 GR/ LB= 1.23 LB/HR X 8760/2000= 5.4 TONS/YR.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-002- 5B Glue line cyclone

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:0
3. Potenti`al Emissions: 5.27 lb/hour 15.9 tons/year	4. Synthetically Limited? [N
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor:0.072 LB/MSF Reference: AP-42 Table 10.5-7, 1/02	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): 73.2 msf/hr x 0.072 lb/msf = 5.27 lb/hrs 441,504 Msf/yr x 0.072 lb/msf/2000 lbs/ton = 15.9 tons/year.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions-002- 5B

1. Pollutant Emitted: H115	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 0.637 lb/hour 1.92 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor:0.0087 LB/MSF Reference: AP-42 Table 10.5-7, 1/02	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): 73.2 msf/hr x 0.0087 lb/msf = 0.637 lb/hrs 441,504 Msf/yr x 0.0087 lb/msf/2000 lbs/ton = 1.92 tons/year.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

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

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: [ ] Rule [x] Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: VE tests every 5 years- as per existing permit conditions B6 and B7.	
5. Visible Emissions Comment (limit to 200 characters):	

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

Continuous Monitoring System: Not applicable

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Supplemental Requirements

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

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- Sanding System – EU003

1. Type of Emissions Unit Addressed in This Section: (Check one)

[x] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] 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.

[ ] 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)

[ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[x] 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): Finishing saws and sanders create sawdust that is transferred to an integrated process cyclone and baghouse to collect the sawdust to use as fuel in the boiler.

4. Emissions Unit Identification Number:
ID: EU003
[ ] No ID
[ ] ID Un

5. Emissions Unit Status Code: A	6. Initial Startup Date:July 1982	7. Emissions Unit Major Group SIC Code:24	8. Acid Rain Unit? [No]

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): CLARK PNEU-AIRE 60 BAG baghouse WITH REVERSE AIR CLEANING
2. Control Device or Method Code(s):18

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-003- Sanding

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate: 441,504 msf/yr		
5. Requested Maximum Operating Schedule: 24hours/day 7 days/week 52weeks/year 8760 hours/year		
6. Operating Capacity/Schedule Comment (limit to 200 characters):		

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Core Title V Regulations	

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

Emission Point Description and Type-003

1. Identification of Point on Plot Plan or Flow Diagram? EP-003	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Baghouse outlet.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: P	6. Stack Height: 30 feet	7. Exit Diameter: 3.4 feet
8. Exit Temperature: 68 °F	9. Actual Volumetric Flow Rate: 29000 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: 29000 dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone:17 East (km):399.540 North (km):3273.790		
14. Emission Point Comment (limit to 200 characters): The baghouse exhausts in a horizontal manner from the top of the baghouse unit. The exhaust leaves the unit around the entire circumference of the baghouse.		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(Emissions Unit 003)

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Softwood Plywood, Sanders and Specialty Saw		
2. Source Classification Code (SCC): 30700792	3. SCC Units: 1000 square feet	
4. Maximum Hourly Rate: 73.20 Msf/hr	5. Maximum Annual Rate: 441,504	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

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-003)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**007**	**018**	**EL**
VOC	**na**		**NS**
Methanol H115	**na**		**NS**

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- EU 003 Sanderdust baghouse

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99.99%
3. Potential Emissions: 3.6 lb/hour 15.8 tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.01 gr/scf Reference: Tests of baghouse under similar function .	7. Emissions Method Code:1
8. Calculation of Emissions (limit to 600 characters): 0.01gr/ scf x 60 min/hr/ 7000 gr/lb x 42,000 scf/m = 3.6 lb/hr x 8760 hrs /2000 = 15.8 tons / hr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): • Taylorsville, MS Plywood Top Sander Baghouse 0.0009 gr/dscf Tested February 2003 • Fordyce Plywood Sander & Specialty Saw Baghouse ; 0.0019 gr/dscf Tested January 2001	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- EU 003 Sanderdust baghouse

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control: 0
3. Potential Emissions: 13.2 lb/hour 57.7 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.18 LB/MSF Reference: AP-42 Table 10.5-7, 1/02	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): .01gr/ scf x 60 min/hr/ 7000 gr/lb x 42000 scf/m = 3.6 lb/hr x 8760 hrs /2000 = 15.8 tons / hr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- EU 003 Sanderdust baghouse

1. Pollutant Emitted: H115	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 0.88 lb/hour 3.85 tons/year	4. Synthetically Limited? [N
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.012 lb/msf Reference: AP-42 Table 10.5-7, 1/02	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): .01gr/ scf x 60 min/hr/ 7000 gr/lb x 42000 scf/m = 3.6 lb/hr x 8760 hrs /2000 = 15.8 tons / hr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

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

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:VE 05	2. Basis for Allowable Opacity: [] Rule [x] Other-by permit
3. Requested Allowable Opacity: Normal Conditions:5 % 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 _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Supplemental Requirements-003

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

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- 1,2,3 Presses –EU 004

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] 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).

[x] 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.

[ ] 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)

[x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] 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):three presses.

4. Emissions Unit Identification Number: [ ] No ID
ID: 004 [ ] ID

5. Emissions Unit Status Code:A	6. Initial Startup Date:July 1982	7. Emissions Unit Major Group SIC Code:24	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):
not applicable

2. Control Device or Method Code(s):

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:		
4. Maximum Production Rate:441504 Msf/year		
5. Requested Maximum Operating Schedule:		
24 hours/day	7days/week	
52 weeks/year	8760 hours/year	
6. Operating Capacity/Schedule Comment (limit to 200 characters):		

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Core Title V regulations	

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

Emission Point Description and Type- Presses

1. Identification of Point on Plot Plan or Flow Diagram? 004	2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Emissions from the presses are exhausted from roof vents above the presses.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Press #1, #2, and #3.		
5. Discharge Type Code: P	6. Stack Height: 35 feet	7. Equiv Exit Diameter: 164 feet
8. Exit Temperature: 115 °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: 2 %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17	East (km): 399.60	North (km): 3273.785
14. Emission Point Comment (limit to 200 characters):		

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): plywood operations		
2. Source Classification Code (SCC):3-07-007-01	3. SCC Units: thousand units produced	
4. Maximum Hourly Rate: 73.20	5. Maximum Annual Rate: 441504	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

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			**NS**
VOC			**NS**
H115-Methanol			**NS**
HAPS			**NS**

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

Potential/Fugitive Emissions- Presses

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 8.8 lb/hour 26.5 tons/year	4. Synthetically Limited? [no
5. Range of Estimated Fugitive Emissions: [x] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.12 lb/ MSF(3/8" basis) Reference: AP-42	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): 0.12 lb/msf x 73.2 Msf/hr = 8.8 lb/ hr 441,504 Msf/yr x 0.12 lb/msf /2000 lb/ton = 26.5 tpy	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- Presses

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 23 lb/hour 68 tons/year	4. Synthetically Limited? [no
5. Range of Estimated Fugitive Emissions: [x] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.31 lb/ MSF(3/8" basis) Reference: NCASI test issued 9/98	7. Emissions Method Code:1
8. Calculation of Emissions (limit to 600 characters): 0.31 lb/msf x 73.2 Msf/hr = 23 lb/ hr 441,504 Msf/yr x 0.31 lb/msf /2000 lb/ton = 68.4 tpy	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- Presses

1. Pollutant Emitted: Methanol –H115	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 22 lb/hour 66.23 tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [x] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.3 lb/msf Reference:NCASI test done onsite 9/98	7. Emissions Method Code: 1
8. Calculation of Emissions (limit to 600 characters): 0.3 lb/msf x 73.2 msf/hr = 22 lb/hr 441504 x 0.3 lb/msf/2000 = 66 tpy	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- Presses-004

1. Pollutant Emitted: HAPS	2. Total Percent Efficiency of Control:0
3. Potential Emissions: 23.9 lb/hour 72 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [x] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.326 lb/msf Reference:NCASI test done onsite 9/98	7. Emissions Method Code: 1
9. Calculation of Emissions (limit to 600 characters): 0.326 lb/msf x 73.2 msf/hr = 23.9 lb/hr 441504 x 0.326 lb/msf/2000 = 72 tpy	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

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

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype: NA	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed:20 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 _____ of _____

1. Parameter Code: NA	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Supplemental Requirements= Presses- EU 004

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

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- Dryers= 005

1. Type of Emissions Unit Addressed in This Section: (Check one)

[x] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] 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.

[ ] 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)

[x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] 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):Three indirect heated (steam heated) Veneer Board dryers with a Regenerative Thermal Oxidizer (RTO)

4. Emissions Unit Identification Number: [ ] No ID
ID: 005 [ ] ID nknown

5. Emissions Unit Status Code: A	6. Initial Startup Date: July 1982	7. Emissions Unit Major Group SIC Code: 24	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):
One Regenerative Thermal Oxidizer to control three dryers. The unit has 5 canisters with 1" saddle packing and is manufactured by Smith.

2. Control Device or Method Code(s): 99

Emissions Unit Details

1. Package Unit:
Manufacturer: RTO; Smith Model Number:

2. Generator Nameplate Rating: MW

3. Incinerator Information:
Dwell Temperature: 1450 °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: 56 Msf/hr	
4. Maximum Production Rate: 441,504 Msf/yr	
5. Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8760 hours/year	
6. Operating Capacity/Schedule Comment (limit to 200 characters): Maximum of 56 msf/hr is an average monthly rate.	

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Core Title V regulations	

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

Emission Point Description and Type- Veneer Dryers 005

1. Identification of Point on Plot Plan or Flow Diagram? EP 6	2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Three dryers primary heating sections vent into the RTO via pipe manifold system and then exhausts through the RTO's single stack. There are also 3 small abort stacks per dryer that are part of the RTO piping system between the dryer and the RTO.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: EU 005		
5. Discharge Type Code:V	6. Stack Height: 45 feet	7. Exit Diameter: 6.17 feet
8. Exit Temperature: 410 °F	9. Actual Volumetric Flow Rate: 72026 acfm	10. Water Vapor: 40 %
11. Maximum Dry Standard Flow Rate: 60000 dscfm	12. Nonstack Emission Point Height: 35 feet	
13. Emission Point UTM Coordinates: Zone:17 East (km):399.600 North (km):3273.800		
14. Emission Point Comment (limit to 200 characters):		

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

Emission Point Description and Type- Veneer Dryers- 005

1. Identification of Point on Plot Plan or Flow Diagram? EP 7	2. Emission Point Type Code: 3

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):
Three Cooling zone stacks at the end of each of the three dryers for a total of nine cooling zone stacks. These cooling zone stacks vent to the atmosphere.

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:
EU005 Dryers

5. Discharge Type Code: V	6. Stack Height: 30 ft	7. Exit Diameter: 2 feet
8. Exit Temperature: [redacted] °F	9. Actual Volumetric Flow Rate: [redacted] acfm	10. Water Vapor: 40 %
11. Maximum Dry Standard Flow Rate: [redacted] dscfm	12. Nonstack Emission Point Height: feet	

13. Emission Point UTM Coordinates:
Zone: 17 East (km): 399.600 North (km): 3273.800

14. Emission Point Comment (limit to 200 characters): EPA determined an RTO was required only for the primary drying zones of the dryer and not the cooling zones due to the low levels of pollutants exiting these stacks.

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): Indirect Heated Dryer: Non-specified Pine Species Veneer		
2. Source Classification Code (SCC):30700760	3. SCC Units: 1000 square feet /3/8 inch basis.	
4. Maximum Hourly Rate:56	5. Maximum Annual Rate: 441504	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

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)-005 VENEER DRYER

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**099**		**EL**
CO			**NS**
VOC	**099**		**NS**
NOx			**NS**
H115-METHANOL	**099**		**NS**
HAPS	**099**		**NS**

Emissions Unit Information Section _____ **of** _____

Pollutant Detail Information Page _____ **of** _____

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

Potential/Fugitive Emissions- DRYER EU 005

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:0 %
3. Potential Emissions: 16.26 lb/hour 71.21 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 62 PPM Reference:May '97 test onsite	7. Emissions Method Code:1
8. Calculation of Emissions (limit to 600 characters): (c) CO unit conversion '28.01(gms/mole) x 0.000001(L/uL) x 0.00221(lbs/gram) x 28.32 (L/dscf)/ 24.014 (L/ Hourly Emission for CO & NOx (lb/hr)=conc. Of compound(30 ppm)x flow (Dscf/min) x Unit conversion (MW/6409312). 62 ppm x60000 dscf x 28.01*0.000001*0.002205*28.32*60/24.014=16.26 lb/hr x 8760 = 71.2 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- DRYER EU 005

1. Pollutant Emitted: Nox	2. Total Percent Efficiency of Control:0 %
3. Potential Emissions: 2.33 lb/hour 10.2 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 5.4 ppm Reference: May '97 test onsite	7. Emissions Method Code:1
8. Calculation of Emissions (limit to 600 characters): 5.4 ppm x 60000 dscf x 46*0.000001*0.002205*28.32*60/24.014 = 2.33 lb/hr x 8760 hrs/yr / 2000 lb/ton = 10 tons/yr.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- DRYER EU 005

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control: 90 %
3. Potential Emissions: 11.29 lb/hour 50 tons/year $COUT uncontrolled	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.224 lb/ msf Reference: AP-42 for hot zone + cooling zone factors	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): 50.4 msf/hr (0.17 + .0540) lb/msf = 11.3 lb/hr 441504 msf/yr x (.17 + .054) lb/msf / 2000lb/ton== 49.5 tons/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- DRYER EU 005

1. Pollutant Emitted: HAPS	2. Total Percent Efficiency of Control:90 %
3. Potential Emissions: 1.8 lb/hour 8 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.0359 LB/MSF Reference:AP-42	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): 0.0359 LB/MSF X 50.4 MSF/HR = 1.8 LB/HR 0.0359 LB/MSF X 441504 MSF/YR/ 2000 = 8 TPY	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- DRYER EU 005

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:50 %
3. Potential Emissions: 6.85 lb/hour 30 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: PREVIOUS PERMIT CONDITION Reference:	7. Emissions Method Code:O
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

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

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

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

Potential/Fugitive Emissions- DRYER EU 005

1. Pollutant Emitted: H115- METHANOL	2. Total Percent Efficiency of Control:90 %
3. Potential Emissions: 0.62 lb/hour 2.72 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.0123 Reference: AP-42	7. Emissions Method Code:3
8. Calculation of Emissions (limit to 600 characters): 00.0123 LB/MSF X 50.4 MSF/HR = 0.62 LB/HR 0.0123 LB/MSF X 441504 MSF/YR/ 2000 = 2.72 TPY	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____ NA

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

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

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: 20 % Maximum Period of Excess Opacity Allowed: 3 min/hour	
4. Method of Compliance: EPA METHOD 9 TEST	
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 _____ of _____ NA

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram [x] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [x] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [x] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [x] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [x] Previously submitted, Date:__2001____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [x] Attached, Document ID:RTO CAM__ [] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [x] Attached, Document ID:_RTO CAM_[] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [x] Not Applicable
9. Other Information Required by Rule or Statute [x] Attached, Document ID:RTO CAM___[] 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
[X] Attached, Document ID: ESP & RTO CAM [ ] 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:_____

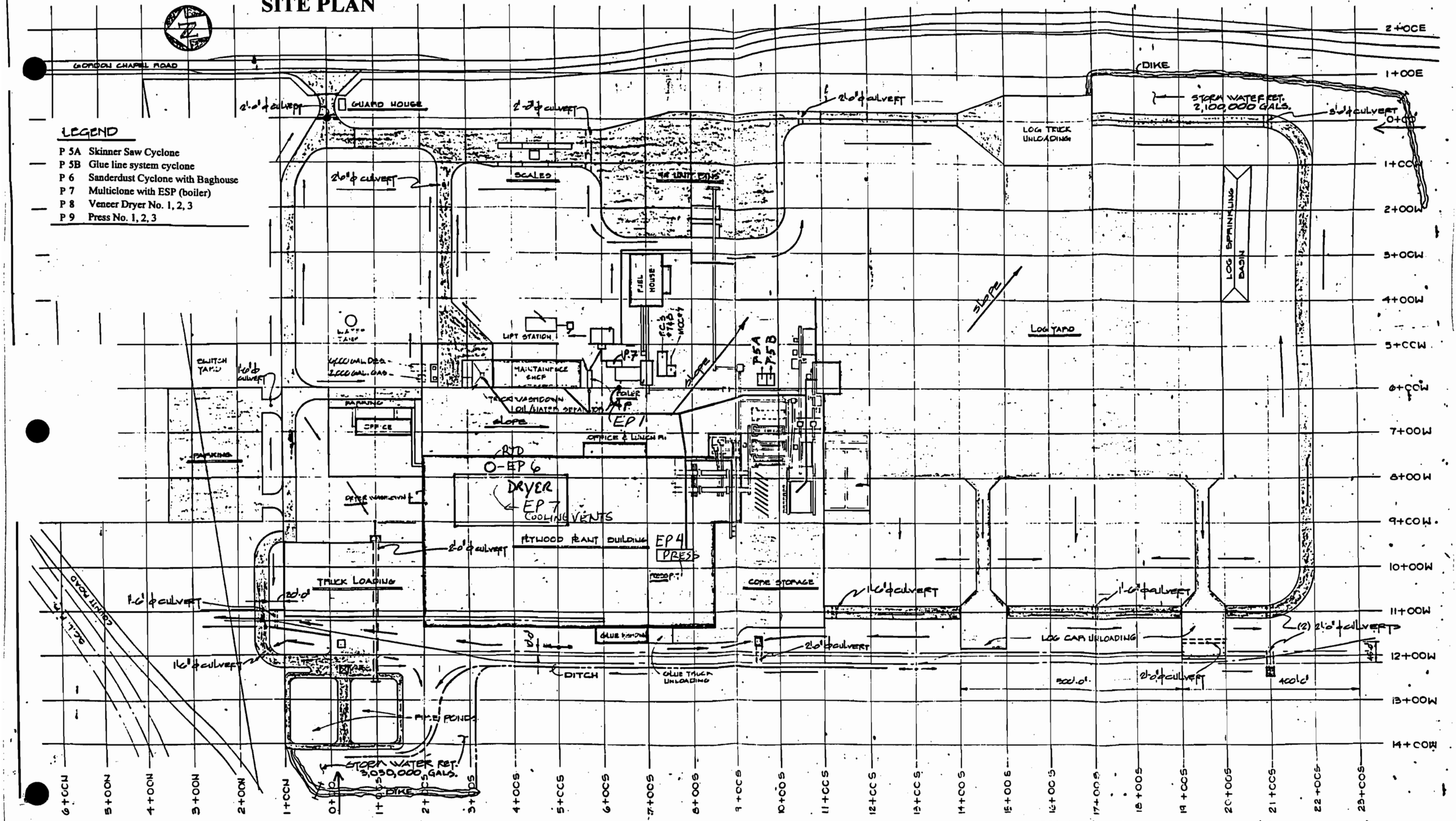
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

SITE PLAN



LEGEND

- P 5A Skinner Saw Cyclone
- P 5B Glue line system cyclone
- P 6 Sanderdust Cyclone with Baghouse
- P 7 Multiclone with ESP (boiler)
- P 8 Veneer Dryer No. 1, 2, 3
- P 9 Press No. 1, 2, 3

FOR ELECTRICAL REF DWGS. 90-0-1 & 90-0-3

REV.	DATE	DESCRIPTION
A	4/1/80	LOCATED MCC#6, RC#6, MCC#7, RC-P7, & P.C.#8
B	7/1/80	DRAINAGE ARROWS & CULVERTS ACCEP
C	10-7-80	OIL/WATER LINES & DELETE SEP. IN WOODYARD

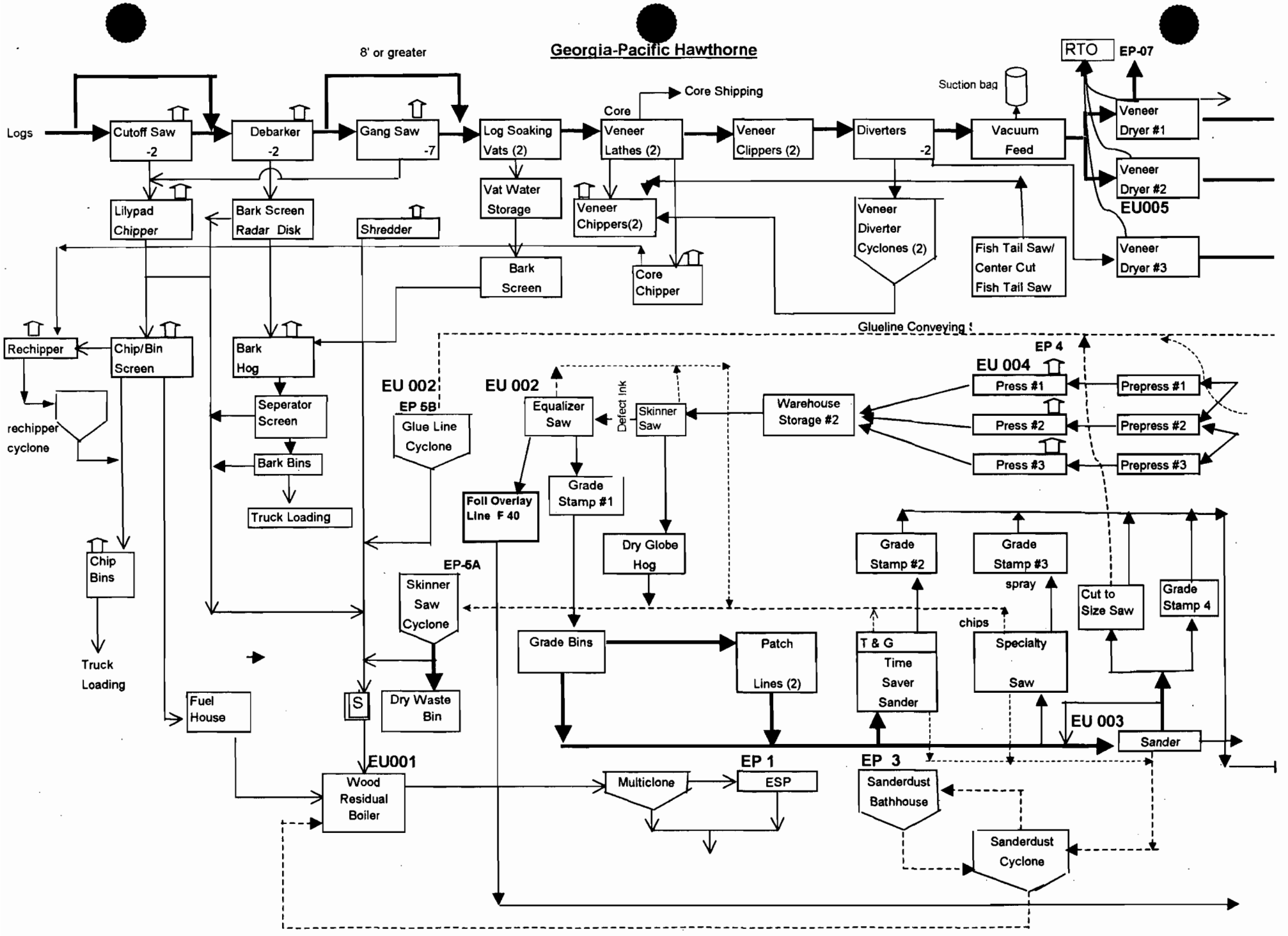
SCALE 1" = 100'-0"
DRAWN BY M. PONCE
DATE 9/11/79
CHECKED BY
DATE
APPROVED BY
DATE

PRINT STATUS
PRELIMINARY
FOR APPROVAL
FOR CONSTRUCTION
REFERENCE ONLY
BIDDING ONLY

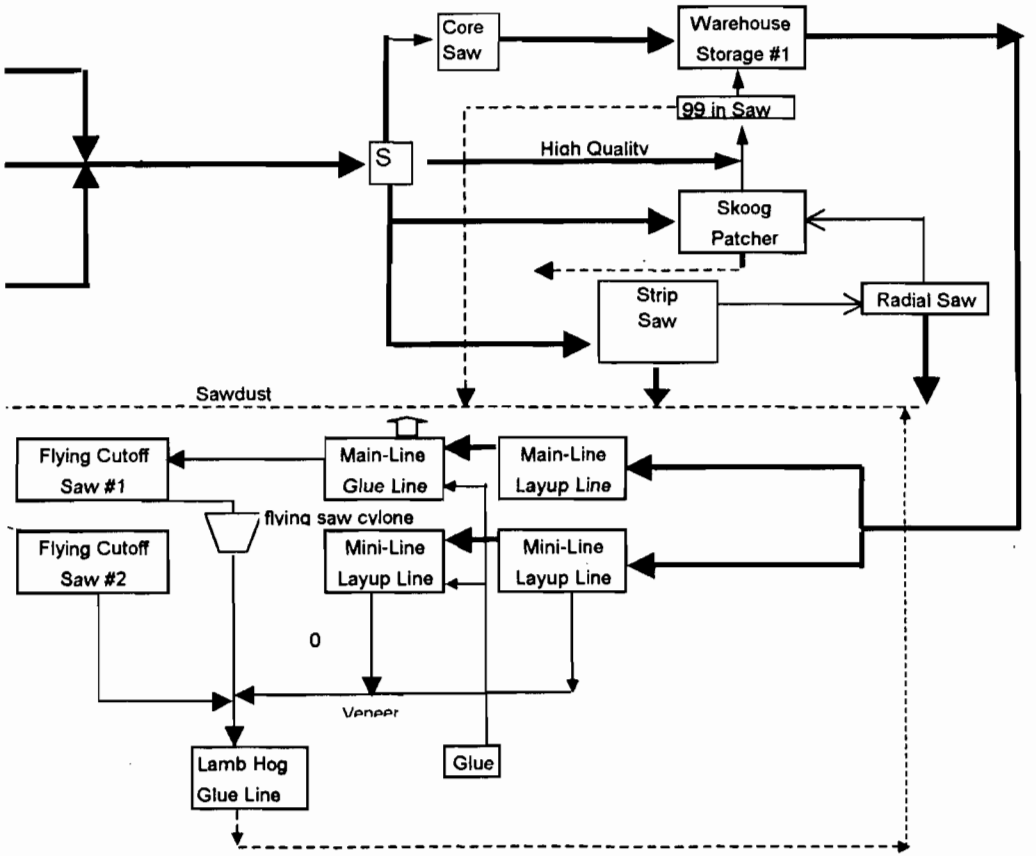
(904) 372-6329
Davis & Associates Engineering
Consulting Engineers for the Forest Products Industry

CUSTOMER GEORGIA PACIFIC CORPORATION
LOCATION HAWTHORNE, FLORIDA
PLYWOOD PLANT FACILITY
SITE DRAINAGE PLAN

EQUIPMENT NO.
MANUF. REFERENCE NO.
JOB NO. 556
DRAWING NO. 10-C-1


Georgia-Pacific Hawthorne
8' or greater
Logs
Cutoff Saw -2
Debarker -2
Gang Saw -7
Log Soaking Vats (2)
Core
Core Shipping
Veneer Lathes (2)
Veneer Clippers (2)
Diverters -2
Suction bag
Vacuum Feed
RTO
EP-07
Veneer Dryer #1
Veneer Dryer #2
EU005
Veneer Dryer #3
Lilypad Chipper
Bark Screen Radar Disk
Shredder
Vat Water Storage
Veneer Chippers(2)
Veneer Diverter Cyclones (2)
Fish Tail Saw/ Center Cut Fish Tail Saw
Bark Screen
Core Chipper
Glueline Conveying
Rechipper
Chip/Bin Screen
Bark Hog
EP 4
EU 004
Press #1
Press #2
Press #3
Prepress #1
Prepress #2
Prepress #3
EU 002
EP 5B
Glue Line Cyclone
EU 002
Equalizer Saw
Defect Ink
Skinner Saw
Warehouse Storage #2
Seperator Screen
Bark Bins
Truck Loading
rechipper cyclone
Foil Overlay Line F 40
Grade Stamp #1
Dry Globe Hog
Chip Bins
EP-5A
Skinner Saw Cyclone
Grade Stamp #2
Grade Stamp #3
spray
chips
Cut to Size Saw
Grade Stamp 4
Truck Loading
Grade Bins
Patch Lines (2)
T & G Time Saver Sander
Specialty Saw
EU 003
Sander
Fuel House
S
Dry Waste Bin
EU001
EP 1
EP 3
Wood Residual Boiler
Multiclone
ESP
Sanderdust Bathhouse
Sanderdust Cyclone

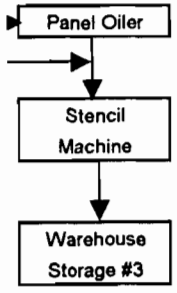
Georgia-Pacific Hawthorne



LEGEND

- Process
- Mechanical Conveyance
- Pneumatic Conveyance
- Stack Emission Point
- Quantified Fugitive Emission Unit

EU - Emission Unit



G-P HAWTHORNE PLYWOOD POLLUTANT POINT SOURCE SUMMARY

Hawthorne, FL - Plywood

Point Sources		PM	VOC	Nox	CO	SO2
002 Glue line system cyclone	5B	5.37	15.89			
002 Skinner Saw cyclone	5A	51.20	18.98			
003 Sanderdust Cyclone with Baghouse		15.77	57.71			
001 Multiclone with ESP (boiler)		147.168	12.75	215.85	588.67	24.53
005 Veneer Dryer No. 1, 2, 3		30.00	50.00	10.19	71.21	
004 Press No. 1, 2, 3		26.49	68.43		4.64	
006 Rechipper (insignificant)		2.04				
		278.03	**223.78**	226.03	**664.51**	24.53

Hawthorne, FL - Plywood									
Total HAPS Summation for the Facility									
	Presses	**Dryers**	**Boiler**	**Glue Line Cyclone 5B**	**Skinner Saw 5A**	**Sander Baghs**	**Total**		
Acetaldehyde	2.43	1.43	0.81	1.79E-01	2.03E-01	0.90	5.96	<10 tpy for facility	
Benzene		0.09	4.12				4.21	<10 tpy for facility	
Formaldehyde	0.42	0.79	4.32	7.51E-02	7.51E-02	0.58	6.26	<10 tpy for facility	
Hydr Chloride (H106)			18.64				**18.64**		
m-Xylene	0.0009	0.42	none known				0.42	<10 tpy for facility	
MEK	0.2	BDL	0.01				0.20	<10 tpy for facility	
Meth (H115)	66.23	3	1.37	1.92E+00	2.65E+00	3.85	**78.73**		
Phenol	0.3	2.47	0.05	4.19E-01			3.25	<10 tpy for facility	
Toluene		BDL	0.90				0.90	<10 tpy for facility	
Vinyl Acetate							0.00	<10 tpy for facility	
Acrolein		BDL	3.92				3.92	<10 tpy for facility	
Total HAPs	72.0	7.9	39.3	2.6	2.9	5.3	**122.49**		

Boiler Combustion Emissions Estimation - Source Information

Facility Name:	Hawthorne, FL - plywood
Source Name:	Boiler
Stack ID:	EU001
Maximum Rating (MMBtu/hr):	224.0
Actual Rating (MMBtu/hr):	163.7
Maximum Rating (MMBtu/yr):	1962240
Actual Rating (MMBtu/yr):	1402640
Maximum Hours of Operation	8760
Actual Hours of Operation	8,568
For Wood Residual Consumption:	
Boiler Type (Stoker/Dutch):	Stoker
Uncontrolled/Controlled:	Controlled

If Controlled -	
Mechanical w/ Flyash Reinjection (Y/N):	n
Mechanical w/o Flyash Reinjection (Y/N):	n
Multiple Collectors in Series (Y/N):	n
Wet Scrubber (Y/N):	n
Electrostatic Precipitator (Y/N):	y

Fuel Data

	Used Oil (a)	Wood Residuals (b,c)		
		Bark	Green End	Dry End
Heating Value (Btu/gal./scfl or /lb)	140,000	4,450	4,450	8,900
% Sulfur	0.5	N	N	N
% Ash	0.65	2	2	2
Actual Hourly Consumption (d)	0.00	13.7	13.7	6.86
Max. Hourly Consumption (e)	0.00	25.2	25.2	12.6
Actual Yearly Consumption (d)	0.0	117,600	117,600	58,800
Max. Yearly Consumption (e)	0.0	220,476	220,476	110,238

NOTE: consumption values should be in 10^3 gallons for used oil and tons for wood residuals.

(a) - Heating value based on engineering judgement; % sulfur and % ash from AP-42 (9/88).

(b) - Heating values from AP-42 & previous GP work; % sulfur and % ash from AP-42 (10/85); % ash based on a range from 1 to 3.

(c) - Bark and green end represents wood residuals with a moisture content of 50%; dry end represents wood residuals with a moisture content between 3 and 50%.

(d) - Average consumption is based on estimated facility fuel consumption.

(e) - Maximum consumption is based on the rated capacity of the fuel burning unit using exclusively the fuel shown in each column. Therefore, each entry corresponds to the maximum fuel requirement for the unit and should not be summed with other entries.

N - negligible

Emission Factors

01/31/03

Process Source	SO_2 factor	SO_2 units	Pb factor	Pb units	CO factor	CO units	NOx factor	NOx units	VOC factor	VOC units
Used Oil (a)	0.525	lb/MMBtu	--	--	0.036	lb/MMBtu	0.136	lb/MMBtu	0.007	lb/MMBtu
Wood Residuals (b)										
Bark and Wet Wood fired boilers	0.025	lb/MMBtu	4.80E-05	lb/MMBtu	0.60	lb/MMBtu	0.22	lb/MMBtu	0.013	lb/MMBtu

Georgia-Pacific Hawthorne Plywood Boiler

MAXIMUM EMISSIONS

Maximum emissions from the combustion unit are generated when the unit is operated at its rated capacity. Maximum emission factors for each pollutant were determined by comparing the emission factors for each fuel (refer to Emission Factor Comparison Table). Maximum emissions were then calculated using the maximum factors for each pollutant and the unit's rated capacity.

If a fuel with a maximum emission factor could only contribute a fraction of the rated capacity of the unit, maximum emissions were estimated by using the maximum emission factor and the fraction of the rated capacity. The remainder of the capacity was then assumed to be generated by the fuel with the next highest emission factor. The emission contributions from both fuels were then summed to achieve the maximum emission rate.

SO_2:

HOURLY

Maximum **Hourly** Emissions from Used Oil = Maximum Hourly Consumption * Emission Factor

= 0.00 gal/hr * 73.5 lb/10^3 gal

= 0.0000 lb/hr

Maximum Hourly Heat Input from Used Oil = $\frac{\text{Maximum Hourly Consumption} * \text{Heating Value}}{\text{Conversion Factor}}$

= $\frac{0.00 \text{ gal/hr} * 140{,}000 \text{ Btu/gal}}{10^6 \text{ Btu/ MMBtu}}$

= 0.00 MMBtu/yr

Maximum Hourly Heat Input from Bark = Maximum Rating - Maximum Hourly Heat Input from Used Oil

= 224.0 MMBtu/hr - 0.00 MMBtu/hr

= 224.00 MMBtu/hr

Maximum Hourly Emissions from Bark = Maximum Hourly Heat Input from Bark * Emission Factor

= 224.00 MMBtu/hr * 0.025 lb/MMBtu

= 5.60 lb/hr

Combined Maximum Hourly Emissions = Maximum Emissions from Used Oil + Maximum Emissions from Bark

= 0.0000 lb/hr + 5.60 lb/hr

= 5.6 lb/hr

SO_2 (cont.): ANNUAL Maximum **Annual** Emissions from Used Oil

$$= \frac{\text{Max. yearly consumption} * \text{Emission Factor}}{\text{2000 lb/ton}}$$

$$= \frac{\text{0 gal/yr} * \text{73.5 lb/}10^3\text{ gal}}{\text{2000 lb/ton}}$$

$$= \boxed{\text{0.0000 ton/yr}}$$

Maximum Annual Heat Input from Used Oil

$$= \frac{\text{Max. yearly consumption} * \text{Heating Value}}{\text{Conversion Factor}}$$

$$= \frac{\text{0 gal/yr} * \text{140,000 Btu/gal}}{10^6\text{ Btu/MMBtu}}$$

$$= \text{0.0000 MMBtu/yr}$$

Maximum Annual Heat Input from Bark

= Maximum Rating * Maximum Operating Hours - Maximum Annual Heat Input from Used Oil

= 224.0 MMBtu/hr * 8,760 hr/yr - 0.0000

= 1,962,240 MMBtu/yr

Maximum Annual Emisssions from Bark

$$= \frac{\text{Maximum Annual Heat Input from Bark} * \text{Emission Factor}}{\text{2000 lb/ton}}$$

$$= \frac{\text{1,962,240 MMBtu/yr} * \text{0.0250 lb/MMBtu}}{\text{2000 lb/ton}}$$

= 24.5 ton/yr

Combined Maximum Annual Emissions

= Maximum Emissions from Used Oil + Maximum Emissions from Bark

= 0.0000 ton/yr + 24.5 ton/yr

= 24.5 ton/yr

CO:

Maximum Hourly Emissions from Bark = Maximum Hourly Heat Input from Bark * Emission Factor

= 224.0 MMBtu/hr * 0.60 lb/MMBtu

= 134 lb/hr

Maximum Annual Emisssions from Bark = Maximum Annual Heat Input from Bark * Emission Factor / 2000 lb/ton

= 1,962,240 MMBtu/yr * 0.60 lb/MMBtu / 2000 lb/ton

= 588.7 ton/yr

NOx:

Maximum Hourly Emissions from Bark = 224.0 MMBtu/hr * 0.22 lb/MMBtu

= 49.3 lb/hr

Maximum Annual Emisssions from Bark = 1,962,240 MMBtu/yr * 0.22 lb/MMBtu / 2000 lb/ton

= 215.8 ton/yr

VOC:

Maximum Hourly Emissions from Bark = 224.0 MMBtu/hr * 0.013 lb/MMBtu

= 2.9 lb/hr

Maximum Annual Emisssions from Bark = 1,962,240 MMBtu/yr * 0.01 lb/MMBtu / 2000 lb/ton

= 12.8 ton/yr

Pb:

Maximum Hourly Emissions from Bark = 224.0 MMBtu/hr * 4.80E-05 lb/MMBtu

= 1.08E-02 lb/hr

Maximum Annual Emisssions from Bark = 1,962,240 MMBtu/yr * 4.80E-05 lb/MMBtu / 2000 lb/ton

= 4.71E-02 ton/yr

Combustion Emissions Summary

Pollutant	Controlled Emissions							
	Actual Hourly		Actual Annual		Maximum Hourly		Maximum Annual	
	Rate	Units	Rate	Units	Rate	Units[3]	Rate	Units
TSP [1]	0	lb/hr	2	ton/yr	33.6	lb/hr	147.2	ton/yr
SO_2	0.92	lb/hr	1.47	ton/yr	5.6	lb/hr	24.5	ton/yr
CO	98.2	lb/hr	420.8	ton/yr	134	lb/hr	588.7	ton/yr
NOx	36.02	lb/hr	154.29	ton/yr	49.28	lb/hr	215.85	ton/yr
VOC	6.22	lb/hr	26.65	ton/yr	2.91	lb/hr	12.75	ton/yr
Pb	7.9E-03	lb/hr	3.4E-02	ton/yr	1.1E-02	lb/hr	0.05	ton/yr

1. TSP based on previously permitted emissions of 0.15 lb/mmbtu.

Actual Emissions

Stack Test Data - May 16, 2002

Run	Grain Loading gr/dscf	Flowrate dscfm	Emissions lb/hr
1	0.00144	33,000	0.4
2	0.00136	33,833	0.4
3	0.001	35,000	0.4
	avg	33,944	

Mean = 0.39 lb/hr

Georgia-Pacific Hawthorne Plywood Boiler
Emissions - Hazardous Air Pollutants

Wood Residuals Burned

A = Actual Annual =	1,402,640	MMBtu/year
B = Actual Hourly =	163.71	MMBtu/hr
C = Max. Annual =	1,962,240	MMBtu/year
D = Max. Hourly =	224.0	MMBtu/hr

	Emission Factors	Emissions			
		Act. Hourly	Act. Annual	Max. Hourly	Max. Annual
Pollutant	(lb/MMBtu) E =	(lb/hr) B x E	ton/yr A x E / 2000	(lb/hr) D x E	ton/yr C x E / 2000
Formaldehyde	0.0044	7.20E-01	3.09E+00	0.9856	4.31693
Hydrogen Chloride	**0.0190**	**3.11E+00**	**1.33E+01**	**4.2560**	**18.64128**
Methanol	**0.0014**	**2.29E-01**	**9.82E-01**	**0.3136**	**1.37357**
TOTAL HAPS	0.038	6.274	26.877	8.585	37.588

Boiler
Emissions - Hazardous Air Pollutants (cont'd)

	Emission Factors	Emissions			
		Act. Hourly	Act. Annual	Max. Hourly	Max. Annual
Pollutant	(lb/MMBtu) E =	(lb/hr) B x E	ton/yr A x E / 2000	(lb/hr) D x E	ton/yr C x E / 2000
Antimony	7.90E-06	1.29E-03	5.54E-03	1.77E-03	0.0078
Arsenic	2.20E-05	3.60E-03	1.54E-02	4.93E-03	0.0216
Beryllium	1.10E-06	1.80E-04	7.71E-04	2.46E-04	0.0011
Cadmium	4.10E-06	6.71E-04	2.88E-03	9.18E-04	0.0040
Chromium, total	2.10E-06	3.44E-04	1.47E-03	4.70E-04	0.0021
Chromium, hexavalent	3.50E-06	5.73E-04	2.45E-03	7.84E-04	0.0034
Cobalt	6.50E-06	1.06E-03	4.56E-03	1.46E-03	0.0064
Manganese	1.60E-03	2.62E-01	1.12E+00	3.58E-01	1.5698
Mercury	3.50E-06	5.73E-04	2.45E-03	7.84E-04	0.0034
Nickel	3.30E-05	5.40E-03	2.31E-02	7.39E-03	0.0324
Phosphorus	2.70E-05	4.42E-03	1.89E-02	6.05E-03	0.0265
Selenium	2.80E-06	4.58E-04	1.96E-03	6.27E-04	0.0027
TOTAL METAL HAPS	0.0017	0.2805	1.2017	0.3838	1.6811
TOTAL HAPS	**0.0400**	**6.5544**	**28.0791**	**8.9684**	**39.2689**

Notes:

1. All wood combustion emissions except for methanol are based on AP-42 factors (Tables 1.6-3. and 1.6-4; March 2002) for thosecompounds included on the CAAA list of 189 HAPs.
2. Methanol emissions are based on " NCASI tech bulletin 701

PROCESS DATA

Unit Name: Skinner Saw Cyclone
Stack ID Number: EU 002 (5A)

Process Operation:

Actual:	6,949	hrs/yr
Maximum:	8,760	hrs/yr

Cyclone Throughputs:

Actual:	36.13	ton/hr	316,534
Maximum:	43.9	ton/hr	384,564

Process Throughputs: (a)

Actual:	52.3	Msf/hr	363,401 Msf/yr
Maximum:	73.2	Msf/hr	441,504 Msf/yr

Emission Factors: (b)

VOC as propane:	0.086	lb/Msf
Acetaldehyde:	0.00092	lb/Msf
Formaldehyde:	0.00034	lb/Msf
Methanol:	0.012	lb/Msf

EMISSIONS CALCULATIONS: (c)

Actual Emissions:

Exhaust Ga 38,505 dscfm Highest of test run by ACE, 6/7/99

Emission Factors:

PM - Sawdust and Hogged Material = 0.02 gr/scf

Emissions Calculations:

Actual Emissions:

nd PM-10 = Flow rate (scfm) X particulate outlet concentration (gr/scf) X 60 min/hr / 7,000 (gr/lb)

= 38,505 scfm 0.02 gr/scf 60 min/hr / 7,000 gr/lb

= 6.60 lb/hr

= 22.9 ton/yr 6,949 hr/yr

Maximum Emissions:

nd PM-10 = Flow rate (scfm) X particulate outlet concentration (gr/scf) X 60 min/hr / 7,000 (gr/lb)

= 6.60 lb/hr

= 28.9 ton/yr 8,760 hr/yr

Allowable Emissions: Based on Permit Number: AO54-227600
11.7 lb/hr PM/PM10 51.2 ton/yr PM/PM10

Emissions Summary:

	Actual Emissions		Maximum Emissions		Permitted MAX	
Pollutant	**lb/hr**	**ton/yr**	**lb/hr**	**ton/yr**	**lb/hr**	**ton/yr**
PM	6.6	22.9	6.6	28.9	11.7	51.2
PM-10	6.6	22.9	6.6	28.9		

VOC Hourly Emissions	=	52.3 Msf/hr x	Emission factor (lb/Msf)
	=	4.50 lb/hr	
VOC Annual Emissions	=	363,401 Msf/yr x	Emission Factor (lb/Msf) / 2000 lb/ton
	=	15.6 ton/yr	
VOC Hourly Emissions	=	73.2 Msf/hr x	Emission factor (lb/Msf)
	=	6.30 lb/hr	
VOC Annual Emissions	=	441,504 Msf/yr x	Emission Factor (lb/Msf) / 2000 lb/ton
	=	19.0 ton/yr	

Allowable Emissions: Based on Permit Number: AO54-227600
11.7 lb/hr PM/PM10 51.2 ton/yr PM/PM10

Pollutants	Estimated Actual Emissions		Estimated Maximum Emissions		Permitted MAX	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	ton/yr
TSP	6.60	22.93	6.60	28.91	11.7	51.2
VOC	4.50	15.6	6.30	19.0		
Methanol	6.28E-01	2.18E+00	8.78E-01	2.65E+00		

Notes:

(a) Process Throughputs are based on the plywood skinner saw.

(b) VOC and Hazardous Air Pollutant emission factors are based on AP-42 factors (Table 10.5-7; January 2002), Softwood plywood saws (includes 3 saws, hog, and sander).

(c) The emission calculations for all of the pollutants that are not represented above, are exactly analogous to the calculations of VOC emissions which is shown.

Georgia Pacific Corporation
Hawthorne, FL Plywood Plant
March 2003

PROCESS DATA

Unit Name: Glue Line Cyclone
Stack ID Number: EU 002 (5B)

Process Operation:

Actual:	6,949	hrs/yr
Maximum:	8,760	hrs/yr

Cyclone Throughputs:

Actual:	0.01	ton/hr	36	ton/yr
Maximum:	0.01	ton/hr	44	ton/yr

Process Throughputs: (a)

Actual:	52.3	Msf/hr	369,792	Msf/yr
Maximum:	73	Msf/hr	441,504	Msf/yr

Emission Factors: (b)

VOC as propane:	0.072	lb/Msf
Acetaldehyde:	0.00081	lb/Msf
Formaldehyde:	0.00034	lb/Msf
Methanol:	0.0087	lb/Msf
Phenol:	0.0019	lb/Msf

EMISSIONS CALCULATIONS:

Exhaust Gas 14,300 scfm (d)

Emission Factors:

PM = Sawdust and Hogged Material = 0.01 gr/scf (d)

Emissions Calculations:

Actual Emissions:

and PM-10 = Flow rate (scfm) X particulate outlet concentration (gr/scf) X 60 min/hr / 7,000 (gr/lb)

= 14,300 scfm 0.01 gr/scf 60 min/hr /
7,000 gr/lb
= 1.23 lb/hr
= 4.3 ton/yr 6,949 hr/yr

Maximum Emissions:

and PM-10 = Flow rate (scfm) X particulate outlet concentration (gr/scf) X 60 min/hr / 7,000 (gr/lb)

= 1.23 lb/hr
= 5.4 ton/yr 8,760 hr/yr

Emissions Summary:

	Actual Emissions		Maximum Emissions	
Pollutant	**lb/hr**	**ton/yr**	**lb/hr**	**ton/yr**
PM	1.2	4.3	1.2	5.4
PM-10	1.2	4.3	1.2	5.4

VOC Hourly Emissions = 52.3 Msf/hr x Emission Factor(lb/Msf)

= 3.77 lb/hr

VOC Annual Emissions = 369,792 Msf/yr x Emission Factor(lb/Msf) / 2000 lb/ton

= 13.3 ton/yr

Maximum Calculations:

VOC Hourly Emissions = 73 Msf/hr x Emission Factor(lb/Msf)

= 5.27 lb/hr

VOC Annual Emissions = 441,504 Msf/yr x Emission Factor(lb/Msf) / 2000 lb/ton

= 15.9 ton/yr

Pollutants	Estimated Actual Emissions		Estimated Maximum Emissions	
	lb/hr	tons/yr	lb/hr	tons/yr
TSP	1.23	4.26	1.23	5.37
VOC	3.77	13.3	5.27	15.9
Methanol	4.55E-01	1.61E+00	6.37E-01	1.92E+00

Notes:

(a) Process Throughputs are based on the plywood glueline (layup line).

(b) VOC and Hazardous Air Pollutant emission factors are based on AP-42 factors (Table 10.5-7; January 2002), Softwood plywood, dry veneer trim chipper (trimmed veneer from layup line).

(c) The emission calculations for all of the pollutants that are not represented above, are exactly analogous to the calculations of VOC emissions which is shown.

(d) Air flow and emission factor of .01 g/scf are based on tests 12/9/94, by ACE, of veneer peeling cyclone. Air flow is the highest airflow for the three test runs.

PROCESS DATA

Unit Name: Sanderdust Baghouse
Stack ID Number: EU003

Process Operations: **Sander**
Actual: 8,429 hrs/yr
Maximum: 8,760 hrs/yr

Process Throughputs: **Sander**
Average: 52 MSF/hr
Maximum: 73 MSF/hr

Emission Factors: (a)

VOC as propane:	0.18 lb/MSF plywood 3/8" basis
Acetaldehyde:	0.0028 lb/MSF plywood 3/8" basis
Formaldehyde:	0.0018 lb/MSF plywood 3/8" basis
Methanol:	0.012 lb/MSF plywood 3/8" basis

EMISSIONS CALCULATIONS:

Actual Calculations:

Exhaust Gas 42,000 scfm estimate from NCASI test issued 9/10/98

Emission Factors:

PM = 1 Sawdust and Hogged Material = 0.01 gr/scf
emiss factor from similar sanderdust baghouses= less < 0.01 gr/scf.

Material exhausted to the baghouse from the cyclone.

Actual:

and PM-10 = Flow rate (scfm) X particulate outlet concentration (gr/scf) X 60 min/hr / 7,000 (gr/lb)
= 41,000 scfm 0.01 gr/scf 60 min/hr /
7,000 gr/lb
= 3.5 lb/hr
= 14.8 ton/yr 8,429 hr/yr

Maximum:

and PM-10 = Flow rate (scfm) X particulate outlet concentration (gr/scf) X 60 min/hr / 7,000 (gr/lb)
= 42,000 scfm 0.01 gr/scf 60 min/hr /
7,000 gr/lb
= 3.6 lb/hr
= 15.8 ton/yr 8,760 hr/yr

Maximum Emissions Summary:

	Controlled Emissions	
Pollutant	**lb/hr**	**ton/yr**
PM	3.6	15.77
PM-10	3.6	15.77

Allowable Emissions:

ACTUALS

VOC = 52 MSF/hr X 0.18 lb/MSF = 9.41 lb/hr
Total = 9.41 lb/hr
= 9.41 lb/hr X 8,429 hr/yr / 2000 lb/ton
= 39.67 ton/yr

Maximum Caculations (cont'd):

VOC = 73 MSF/hr X 0.18 lb/MSF = 13.176 lb/hr

Total = 13.2 lb/hr

= 13.2 lb/hr X 8,760 hr/yr / 2000 lb/ton

= 57.71 ton/yr

Pollutants	Estimated Actual Emissions		Estimated Maximum Emissions	
	lb/hr	tons/yr	lb/hr	tons/yr
TSP	3.5	14.8	3.6	15.8
VOC	9.4	39.7	13.2	57.7
Methanol	0.63	2.64	0.88	3.85

Note:

(a) Emission factors based on AP-42 (Table 10.5-7; January 2002)

EMISSION UNIT DATA

Equipment: Press No. 1, 2, 3
Equipment ID No.: EU 004
Emission Unit:

Notes and Assumptions:

1. All particulate emissions from the presses are assumed to be < 10 microns in diameter, therefore PM-10 =PM.
2. Emission factors for veneer dryers were based on Georgia-Pacific source test results from representative similar sources.

Emission Unit Operation:

Actual: 6,949 hr/yr
Maximum: 8,760 hr/yr

Emission Unit Input:

Actual: 52 Msf (3/8 inch)/hr
369,792 Msf (3/8 inch)/yr
Maximum: 73.2 Msf (3/8 inch)/hr
441,504 Msf (3/8 inch)/yr and is based on maximum dryer production.

Pollutant	Emission Factor	Method
PM = PM-10:	0.12 lb/Msf (3/8 inch)	ap-42
PM-10:	0.12 lb/Msf (3/8 inch)	no data
CO:	0.021 lb/Msf (3/8 inch)	EPA Method 10
VOC:	0.31 lb/Msf (3/8 inch)	NCASI test issued 9/98
Acetaldehyde:	0.0110 lb/Msf (3/8 inch)	NCASI test issued 9/98
Benzene:	BDL lb/Msf (3/8 inch)	NCASI test issued 9/98
Formaldehyde:	0.0019 lb/Msf (3/8 inch)	NCASI test issued 9/98
Limonene	0.0110 lb/Msf (3/8 inch)	NCASI test issued 9/98
m-Xylene:	4.0E-06 lb/Msf (3/8 inch)	NCASI test issued 9/98
MEK:	0.00087 lb/Msf (3/8 inch)	AP-42-10.5-6 1/2002
Methanol:	0.300 lb/Msf (3/8 inch)	NCASI test issued 9/98
Phenol:	0.0014 lb/Msf (3/8 inch)	AP-42-10.5-6 1/2002
Toluene:	BDL lb/Msf (3/8 inch)	AP-42-10.5-6 1/2002
Total HAPs	0.32617	

Emissions Calculations:

Hourly Emissions (ton/hr) = Throughput (Msf (3/8 inch)/hr) X Emission Factor (lb/Msf (3/8 inch)) / 2,000 (lb/ton)
Annual Emissions (ton/yr) = Throughput (Msf/yr (3/8 inch)) X Emission Factor (lb/Msf (3/8 inch)) / 2,000 (lb/ton)

Emissions Summary:

Pollutant	Actual Emissions		Maximum Emissions			
	lb/hr	ton/yr	lb/hr	ton/yr		
PM	6.3	22.2	8.8	26.5		
PM10	6.3	22.2	8.8	26.5		
CO	1.1	3.9	1.5	4.6	(a)	
VOC	16.2	57	23	68		
Acetaldehyde	0.58	2.0	0.8	2.43	(d)	
Formaldehyde	0.10	0.4	0.1	0.42	(b)	(d)
Limonene	0.58	2.0	0.8	2.43		(d)
m-Xylene	0.0002	0.00074	0.0003	0.0009	(b)	(d)
MEK	0.05	0.16	0.06	0.2	(b)	(d)
Methanol	15.7	55.5	22.0	66.23		
Phenol	0.1	0	0.10	0.3	(b)	
Total HAPs			23.9	72.0		

NOTES:

(a) CO below reporting threshold of 5 tpy per application.
(b) HAP compounds below reporting thresholds of 1 tpy per application instructions.
(c) 21.96 lb/hr based on 73.2 Msf/hr.
(d) facilty is not major for this HAP

EMISSION UNIT DATA

Equipment: Veneer Dryer No. 1, 2, 3
Equipment ID No.: EU 005
Notes and Assumptions:

1. All particulate emissions from the dryers are assumed to be < 10 microns in diameter; therefore, PM-10 = PM.
2. A summary of production throughput calculations and assumptions is provided in Chapter 1.
2. Emission factors for veneer dryers were based on Georgia-Pacific source test results from representative similar sources and on-site testing.

Emission Unit Operation:

Actual:	8,274 hr/yr
Maximum:	8,760 hr/yr

Emission Unit Input:

Actual:	45 Msf/hr (3/8 inch)
	369,792 Msf/yr (3/8 inch)
Maximum:	50.4 Msf/hr (3/8 inch)
	441,504 Msf/yr (3/8 inch)

Average Airflow:	26,000 dscf/min
Maximum Airflow:	60,000 Dscf/min

Pollutant	Emission Factor	Method	
PM per permit	6.85 lb/hr	Permit Limit	
PM RTO Outlet	1.6400 lbs/hr	May '97 test at Hawthorne-hi	(d)
PM Cooling Zone	0.1000 lb/Msf (3/8 inch)	Avg of GP Tests at Haw, Whiteville,Emporia, Dudley	
CO	62.00 ppm	May '97 test at Hawthorne-highest test run value	
VOC RTO Outlet:	0.1700 lb/Msf (3/8 inch)	ap-42	
VOC Cooling Zone	0.0540 lb/Msf (3/8 inch)	ap-42	
NOx	5.40 ppm	May '97 test at Hawthorne-highest test run value	
Acetaldehyde-rto outlet:	0.0019 lb/Msf (3/8 inch)	ap-42	(e)
Acetaldehyde-cooling zone:	0.0046 lb/Msf (3/8 inch)	ap-42	
Acrolein:	BDL lb/Msf (3/8 inch)	ap-42	(e)
Benzene:	0.0004 lb/Msf (3/8 inch)	ap-42	(e)
Formaldehyde (heat zone)	0.0023 lb/Msf (3/8 inch)	ap-42	(e)
Formaldehyde (cool zone):	0.0013 lb/Msf (3/8 inch)	ap-42	
m-Xylene (heat zone):	BDL lb/Msf (3/8 inch)	ap-42	(e)
m-Xylene (cool zone):	0.0019 lb/Msf (3/8 inch)	ap-42	
o-xylene (cool zone)	0.0014 lb/Msf (3/8 inch)	ap-42	
MEK:	BDL lb/Msf (3/8 inch)	ap-42	(e)
Methanol (heat zone):	0.0023 lb/Msf (3/8 inch)	ap-42	(e)
Methanol (cool zone):	0.0100 lb/Msf (3/8 inch)	ap-42	
Phenol (heat zone)	0.0050 lb/Msf (3/8 inch)	ap-42	
Phenol (cool zone)	0.0062 lb/Msf (3/8 inch)	ap-42	
Toluene:	BDL lb/Msf (3/8 inch)	ap-42	(e)
TOTAL HAPS	0.0359 lb/Msf (3/8 inch)		

(b) Criteria and Hazardous Air Pollutant emission factors for veneer dryers are based AP-42 factors (Tables 10.5-1, 10.5-2 and 10.5-3; January 2002). PM emission factor based on Veneer Cooling Vent factor from GP source tests at similar facilities.

Emissions Calculations:

Hourly Emissions (ton/hr) = Throughput (Msf (3/8 inch)/hr) X Emission Factor (lb/Msf (3/8 inch)) / 2,000 (lb/ton)
Annual Emissions (ton/yr) = Throughput (Msf (3/8 inch)/yr) X Emission Factor (lb/Msf (3/8 inch)) / 2,000 (lb/ton)
Hourly Emission for CO & NOx (lb/hr)=conc. of compound(30 ppm)x flow (Dscf/min) x Unit conversion (MW/6409312), (c)

Emissions Summary:

Pollutant	Actual Emissions		Maximum Emissions		
	lb/hr	ton/yr	lb/hr	ton/yr	
PM	6.11	25	6.85	30	
CO	7.04	30.86	16.26	71.21	
NOx	1.01	4.41	2.33	10.19	
VOC	7.60	40.00	11.29	50.00	
Acetaldehyde	0.08	0.35	0.33	1.43	(b)
Benzene	0.02	0.07	0.02	0.09	(a) (b) also applies
Formaldehyde	0.16	0.67	0.18	0.79	(b)
m-Xylene	0.08	0.35	0.10	0.42	(a)
Methanol	0.55	2.27	0.62	2.72	report due to facility > 10 tpy
Phenol	0.50	2.07	0.56	2.47	
Total HAPs			1.8	7.92	report due to facility > 25 tpy

NOTES:

(a) HAP compounds below reporting thresholds of 1 tpy per application instructions.

(b) The facility is not major(>10 tpy) for these pollutants and below application reporting threshold

(c) CO unit conversion 28.01(gms/mole) x 0.000001(L/uL) x 0.00221(lbs/gram) x 28.32 (L/dscf)/ 24.014 (L/mole)

(d) PM test emissions are so low, the test is approaching the reliability limit of the test method, therefore the the values have a potential for greater fluctuation. Actual tests resulted in .07 lb/msf, we'll use 0.1 lb/msf for conservancy.

(e) HAPS estimates were tripled from the original values that were exiting the dryers and then the 90% reduction for the RTO destruction factor applied to that value.

GP
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Fugitive Emissions Summary- ATTACHMENT D

The facility fugitive emissions have been grouped as a single fugitive emission point. The fugitive sources are grouped into two catagories; Quantifiable and Unquantifiable. The unquantifiable sources either do not have emission factors or do not have emissions at levels that can be estimated.
Total VOC and HAPs emissions are below the minimum reporting threshold.

Quantifiable Fugitive Sources

ID	Source	Potential Emissions tons/yr			
		PM	PM10	VOC	HAPs
F20	Cutoff Saw No. 1, 2	1.47	0.53		
F21	Debarkers No. 1, 2	10.50	4.81		
F22	Gang/Slasher Saws (8)	2.73	0.98		
F23	Lily Pad Chipper	0.10	0.05		
F24	Rechipper	0.24	0.11		
F25	Veneer Chippers (2)	1.84	0.84		
F26	Chip Bin Screen	2.33	1.07		
F27	Core Chipper	0.42	0.19		
F28	Chip Bin and Truck Loading	4.89	2.24		
F29	Bark Hog	0.19	0.09		
F30	Separator Screen	0.19	0.09		
F31	Bark Bin and Truck Loading	1.30	0.59		
F32	Shredder	0.19	0.09		
F33	Glue Lines			0.22	0.77
F34	Dry Waste Bin and Truck Loading	0.37	0.17		
F40	Foil Overlay- Sealer			10.70	2.15
F41	Log Soaking Vats			16.42	2.65
F35	Unpaved Roads	8.80	3.16		
	TOTAL tpy	35.6	15.0	27.34	0.77
	Average lb/hr based on 8,760 hrs.	8.1	3.4	6.2	0.2

Unquanified, Insignificant, and Exempt Emission Sources

1 Diesel Tank No. 1
2 Diesel Tank No. 2
3 Diesel Tank No. 3
4 Diesel Tank No. 4
5 Gasoline Tank No. 1
6 Gasoline Tanks No. 2, 3
7 Hydraulic Oil Tank
8 Used Oil Tank
9 Form Oil Tank
10 Form Oil Tank
11 Glue Tanks No. 1, 2, 3
12 Glue Tanks No. 4, 5, 6, 7
13 Glue Tanks No. 8, 9
14 Caustic Soda
15 Log Yard
16 Log Soaking Vats

17 Veneer Lathes
18 Vat Water Storage
19 Bark Screen
20 Bark Screen Radar Disk
21 Warehouse Storage
22 Fuel House
23 Diverters
24 Vacuum Feed
25 Flying Cut-Off Saws

Fugitive Emissions Production Information

Fugitive emission estimates from sources at this facility requires that material input through those sources are known quantities. In some cases the input for an emissions unit may not be directly measured. Through general knowledge of this facility plywood process and actual production records, material input has been estimated for individual emission sources.
Note that in most cases, a "worse case operating condition" was assumed and for this reason negates the possibility of a complete mass balance around groups of emission units.

conversion	2.86	cords/Mbf
conversion	5360	lbs/cord
conversion	1800	lbs/Msf
conversion	9.0	ton/Mbf

Source		Comments/Conversion				Material Input	
log yard							
actual capacity	80,476	Mbf/yr	or	230,161	cords	724,284	ton/yr
max capacity	98,112	Mbf/yr	or	280,600	cords	883,008	ton/yr
Cut Off Saw No.1, 2							
actual capacity	35	% of log yard goes through cut off saws				253,499	ton/yr
max capacity	35	% of log yard goes through cut off saws				309,053	ton/yr
Debarkers No.1, 2							
actual capacity		log yard - lily pad chipper =				717,403	ton/yr
max capacity		log yard - lily pad chipper =				874,619	ton/yr
Gang/Slasher Saws (7)							
actual capacity	65	% of log yard through gang Slasher saws				470,785	ton/yr
max capacity	65	% of log yard through gang Slasher saws				573,955	ton/yr
Lily Pad Chipper							
actual capacity	0.95	% of log yard goes to lily pad chipper				6,881	ton/yr
max capacity	0.95	% of log yard goes to lily pad chipper				8,389	ton/yr
Rechipper							
actual capacity	10	% of shipped chips				17,082	ton/yr
max capacity*	10	% of shipped chips				20,395	ton/yr
Veneer Chippers (2)							
actual capacity	75	% of shipped chips				128,115	ton/yr
max capacity	75	% of shipped chips				152,960	ton/yr
Chip Bin Screen							
actual capacity	22	% of log yard				159,342	ton/yr
max capacity	22	% of log yard				194,262	ton/yr
Core Chipper							
actual capacity	4	% of log yard				28,971	ton/yr
max capacity	4	% of log yard				35,320	ton/yr
Chip Bin and Truck Loading							
actual capacity	=	shipped chips				170,820	ton/yr
max capacity	=	shipped chips				203,946	ton/yr
Bark Hog							
actual capacity	30	% of shipped bark				13,568	ton/yr
max capacity	30	% of shipped bark				16,200	ton/yr
Separator Screen							
actual capacity	=	bark hog				13,568	ton/yr

Source		Comments/Conversion	Material Input
max capacity	=	bark hog	16,200 ton/yr
Bark Bin Loading			
actual capacity	=	shipped bark	45,228 ton/yr
max capacity	=	shipped bark	53,999 ton/yr
Bark Bin Unloading			
actual capacity	=	shipped bark	45,228 ton/yr
max capacity	=	shipped bark	53,999 ton/yr
Shredder (2)			
actual capacity	30	% of shipped bark	13,568 ton/yr
max capacity	30	% of shipped bark	16,200 ton/yr
Main-Line Glue Line			
actual capacity			363,401 Msf/yr
max capacity			441,504 Msf/yr
Dry Waste Bin and Truck Loading			
actual capacity	=	plytrim shipped	12,893 ton/yr
max capacity	=	plytrim shipped	15,393 ton/yr

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Facility Attachment E

Insignificant Activities Identification

The following is a list of activities that are considered insignificant by rule or by quantity of emissio based on reporting quantities outlined in the application instructions.

Diesel Tanks (6,000 gal. and 8,000 gal.)
Gasoline Tank (6,000 gal.)
Hydraulic Oil Tank (8,000 gal.)
Used Oil Tank (6,000 gal.)
Form Oil Tank (10,000 gal.)
Caustic Soda Tank (8,000 gal)
Glue Tanks (3 x 12,000 gal., 4 x 10,000 gal., 2 x 1,000 gal.)
Propane Tanks (15,000 gal. and 1,000 gal.)
Rechipper
Vat Water Storage
Pre-Presses
Grade Stamps
Panel Oiler
Stencil Machine
Equipment Maintenance Degreasing Activities
Maintenance Painting Activities
Foil Overlay and Sealer sprayer

Georgia- Pacific Hawthorne Plywood Plant- Re-routing the Rechipper Chips

EMISSION UNIT DATA

Equipment: Rechipper Cyclone

Equipment ID No.: F24

Re-Chipper Cyclone Maximum Estimates

This cyclone is being installed to collect all material going through the rechipper and drop it onto a mechanical conveyor. This will avoid re-routing the material back through the screen just to drop it onto the conveyor. The material doesn't need to be screened more than once and it is overloading the screen and sometimes clogs the screening system.

Notes and Assumptions:

1. All particulate emissions are assumed to be < 10 microns in diameter; therefore, PM-10 = PM.
2. Efficiencies are based on Georgia-Pacific stack test results and best engineering estimates of the amount of material processed by the cyclone.
3. The material being transferred through the cyclone is "green" chips that have not been dried and therefore have an average of 50% moisture content.

Amount of material going through the rechipper is estimated to be 10% of all the chips (which are all sold)

Chips shipped in '99 = 170,820 tons of chips processed and shipped in 1999.

Rechipper			
actual capacity	10 % of sold chips =	17,082	ton/yr
max capacity*	10 % of sold chips =	20,395	ton/yr

*Max number of chips is based on a ratio of max dryer production to '99 production, which is 441504 /369792msf/yr=1.19

Emission Unit Operation:

Maximum*: 8,760 hr/yr
2.3 tons/hr
20,395 tons/yr

Control Efficiencies: 99.99% efficiency

Maximum Emissions: PM/PM10

Maximum Emissions: PM/PM10

lb/hr = ton/hr of chips in rechipper x 8760 hrs/year x (1- efficiency) x 2000 lb/ton

= 2.33 tons/hr x hr x (1 - 0.9999) x 2,000 lb/ton

= 0.5 lb/hr

tons/yr = max lb/hr emissions x 8760 hours maximum per year.

2.04 tons/yr

COMPLIANCE ASSURANCE MONITORING

In order for the Compliance Assurance Monitoring (CAM) Rule to apply to a specific emission unit/pollutant, the following, four criteria must be met:

1) The emission unit must be located at a major source for which a part 70 or Part 71 permit is required.
2) The emission unit must be subject to an emission limitation or standard.
3) The emission unit must be a control device to achieve compliance.
4) The emission unit must have potential, pre-controlled emissions of the pollutant of at least 100 percent of the major source threshold.

The federal regulations, at 40 CFR 64.5(3), state the following with regard to submittal of a CAM Plan:

> *"The owner or operator shall submit any information not submitted under the deadlines set forth in paragraphs (a)(1) and (2) of this section as part of the application for renewal of a part 70 or 71 permit."*

As defined in 40 CFR 64.1 a "control device" is "equipment other than inherent process equipment that is used to destroy or remove air pollutants(s) prior to discharge to the atmosphere." Inherent process equipment is defined as "equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations.

Although the Boiler Multi-Clone, Skinner Saw cyclone, Glue Line Cyclone, and Sanding System Baghouse are identified as air pollution control equipment in Section A of this application, according to the CAM definitions these devices represent "inherent process equipment" because the process cannot operate in the absence of the device. Cyclones and Baghouse are necessary for the recovery of material and the multi-clone on the boiler is necessary for the protection of the I.D. fan and to prevent the release of sparks and burning fuel residue. As such, a CAM Plan is not required as part of this permit renewal application submittal for these devices.

Waste-wood Fired Boiler- Emission Unit 001

Electro-Static Precipitator for Particulate Matter Control—Hawthorne Plywood Plant

I. Background

A. Emissions Unit

Description:	Waste-wood Fired Boiler
Manufacturer:	Zurn
Capacity:	224 MMBtu/hour
Facility:	Hawthorne Plywood Plant 223 Gordon Chapel Road Hawthorne, Florida 32640

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation:	Permit 1070015-001-AV
Emissions limit:	0.15 lb/MMBtu (PM) 33.6 pounds per hour 146.76 tons per year

Proposed CAM Monitoring requirements: Inductance Angle; Secondary voltage/current

C. Control Technology

Description:	Electro-static Precipitator (ESP)
Manufacturer:	PPC Industries 3-cell, model 2OR-1330-3712S
Capacity:	99,100 ACFM

II. Monitoring Approach

Parameters to Monitor: The key element of the monitoring approach for PM emissions is transformer-rectifier (TR) set induction angle. Secondary voltage and secondary current are indicators of induction angle. The secondary voltage and secondary current from each TR set will be recorded every two (2) hours.

Waste-wood Fired Boiler- Emission Unit 001

MONITORING APPROACH JUSTIFICATION

I. Background

The emissions unit (EU) consists of the boiler and related appurtenances in the steam production area. The process consists of fuel feeders, a grate, steam tubes, fire box, heat exchangers, and duct work. The boiler operates continuously when the plant is in normal operation. Wood waste is spread on the grate, where it burns to heat water in the tubes. Exhaust gases pass across an economizer then through a multi-clone, after which they pass through the ESP. The boiler is pressurized by a forced-draft fan, which pushes the exhaust gases through the system.

II. Rationale for Selection of Performance Indicators

An Electro-Static Precipitator (ESP) is used to capture PM emissions from the wood-waste fired boiler. The steam production area of the facility is in continuous operation, except for one or two annual maintenance periods. Production varies slightly, but is usually about 120,000 to 140,000 pounds per hour of steam. To comply with the applicable emission limit a minimum secondary voltage must be maintained.

III. Rationale for Selection of Indicator Ranges

The indicator ranges will be selected based on the following test as recommended by the manufacturer. One TR set is shut down, and the conductance angle on another TR set is reduced manually until visible emissions began to appear from the stack. The secondary voltages at the two operating TR sets at this breakthrough point are added.

Since PM removal increases with increasing secondary voltage the emissions unit will be deemed to be in compliance as long as the sum of the secondary voltages of all operating TR sets are greater than the breakthrough value (to be determined),.

Compliance will be demonstrated by recording the secondary voltage and secondary current of each TR set manually once every two (2) hours while the boiler is in operation.

Veneer Dryers 1, 2, 3 with RTO, Emission Unit 005

MONITORING APPROACH JUSTIFICATION

I. Background

The emissions unit (EU) consists of the three (3) veneer dryers. The process consists of veneer feeders, dryers, hot zone stacks, cool zone stacks, outfeed conveyors, and related duct work. The dryers operate continuously when the plant is in normal operation, except that one (1) dryer is taken off line approximately seven (7) hours each week for routine maintenance and cleaning. Airflow is ducted from three (3) hot zones in each dryer to a pressure equalization chamber and then to the RTO. PM and VOC compounds are burned in a retention chamber then the exhaust gases are vented to the atmosphere.

II. Rationale for Selection of Performance Indicators

A regenerative thermal oxidizer (RTO) is used to reduce PM and VOC emissions from part of the plywood manufacturing process. Emissions from three (3) dryers are ducted to the RTO. The veneer drying processes are continuous operations, but the production rate varies slightly with species of wood and veneer thickness. PM and VOCs from pine veneer are combustible. The fraction of PM and VOCs that combust, increases with rising temperature and residence time. Stack airflow, which varies inversely with residence time, is an indicator of residence time. Therefore, average retention chamber temperature and stack airflow have been selected as performance indicators for the RTO.

To comply with the applicable emission limit, a minimum average retention chamber temperature must be maintained, and a maximum stack airflow must not be exceeded.

III. Rationale for Selection of Indicator Ranges

Past PM and destruction/removal efficiency (DRE) testing has shown that this unit exceeds the required standards of 6.85 pounds per hour and 90% destruction efficiency at a minimum average retention chamber temperature of 1,475° F and at a maximum average stack flow rate of 72,026 actual cubic feet per minute (ACFM). As PM removal and DRE vary directly with retention chamber temperature, any temperature above 1,475° F will meet the emission standard. Over the operating range of the unit, PM removal and DRE increase with increasing retention chamber temperature, so a maximum temperature limit is not necessary.

Since PM removal and DRE vary inversely with stack flow rate, any flow rate less than 72,026 ACFM will cause the RTO to meet the emission standards. Over the operating range of the unit, PM removal and DRE increase with decreasing stack flow rate, so a minimum stack flow limit is not necessary.

Veneer Dryers 1, 2, 3 with RTO, Emission Unit 005

Regenerative Thermal Oxidizer for VOC Control—Hawthorne Plywood Plant

I. Background

A. Emissions Unit

Description:	Three (3) Veneer Dryers
Manufacturer:	Coe Manufacturing
Capacity:	50,400 square feet -3/8" per hour (total)
Facility:	Hawthorne Plywood Plant 223 Gordon Chapel Road Hawthorne, Florida 32640

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation:	Permit 1070015-001-AV
Emissions limit (PM)	6.85 pounds per hour 30.0 tons per year
VOC	Track VOC emissions on a monthly basis
HAPS	Track HAPS emissions on a monthly basis

C. Control Technology

Description:	Regenerative Thermal Oxidizer (RTO)
Manufacturer:	Smith Environmental 5-can, model AB59HX95
Capacity:	59,200 SCFM, wet

II. Monitoring Approach

The key elements of the monitoring approach for PM and VOC emissions are the same. The selected indicators of performance are the retention chamber temperature and stack flow rate. These parameters are measured twice per second, and averaged every fifteen (15) minutes. The 15-minute averages are averaged twice per day: from midnight until noon, and from noon until midnight.

Georgia Pacific - Hawthorne Plywood 1070015

Boiler

✓ - Need correlating Stack test results and associated Pressure Drops.

✓ - Need Monitoring approach Table

✓ - Need Elect. copy of " "

✓ - Implementation plan is unacceptable

✓ - Does ESP currently Really not have a volt meter?

✓ - Provide acceptable CAM Plan Now.

X - 4/hr Frequency

✓ - Shutting down Cells of ESP is a Violation of permit (?) - Need to get AC for testing or provide CAM Indicators pursuant to available information.

- Indicators should be reflective of normal ops.

RTO