STATEMENT OF BASIS

for the issuance of Draft Air Permit # 1803-AOP-R0

1. PERMITTING AUTHORITY:

Arkansas Department of Pollution Control and Ecology
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913

2. APPLICANT:

Georgia-Pacific Oriented Strandboard Facility
State Highway 274
Fordyce, Arkansas 71742

3. PERMIT WRITER:

Michael H. Watt

4. PROCESS DESCRIPTION AND SIC CODE:

SIC Description: 2493
SIC Code: Oriented Strandboard Manufacturing

5. SUBMITTALS: June, 1998, August 3, 1999, October 14, 1999.

6. REVIEWER'S NOTES:

Georgia-Pacific Corporation (GP) proposes to construct and operate an oriented strandboard (OSB) facility near Fordyce, Arkansas. This facility will have the capacity to produce 475 million square feet (MMSF), on a 3/8-inch basis, of OSB annually. This facility will include five dryers, a press, and associated materials handling equipment. The dryers and press will be controlled by three regenerative thermal oxidizers (RTOs). Two of the RTOs will be dedicated to the dryers and the third will control emissions from the press. Particulate matter emissions resulting from material handling will be controlled by a series of bag filters. This modification corrects the fugitive emission calculations and updates PSD modeling because of a change in stack parameters.

GP is considered a major stationary source under the Prevention of Significant Deterioration (PSD) Regulations. Emissions in this permit for PM/PM_{10}, VOC, CO, and NO_X are above the PSD significance levels.

7. COMPLIANCE STATUS: The following summarizes the current compliance status of the facility including active/pending enforcement actions and recent compliance activities and issues

This facility is under full compliance.

8. APPLICABLE REGULATIONS:

NSPS (Y/N) N If yes, subpart _____
NESHAP (Y/N) N If yes, subpart _____
PSD applicability (Y/N) Y
Is facility on 28 list (100 tpy)? (Y/N) N
Was netting performed to avoid PSD review (Y/N) N

Subject to 112 (g) requirements (Y/N) N
Subject to CAM requirements (Y/N) Y
Other applicable regulations

9. EMISSION CHANGES:

The following table summarizes plantwide emission changes associated with this permitting action.

Plantwide Permitted Emissions (ton/yr)			
Pollutant	**Air Permit 1803-AOP-R0**	**Air Permit 1803-AOP-R0**	**Change**
PM	603.4	682.4	79
PM_{10}	443.0	474.2	31.2
SO_2	20.5	20.5	0
VOC	641.8	641.8	0
CO	179.0	179.0	0
NO_X	368.1	368.1	0
Formaldehyde	9.85	9.85	0

10. MODELING:

Air Toxics Analysis

The facility emits formaldehyde from the dryers and the presses. In order to determine if these emissions pose a significant health risk to the general public, an analysis was performed using the procedures outlined in the ADPC&E's Non-Criteria Pollutant Control Strategy (Revised 1996) and federal guidelines on air quality modeling. The Control Strategy contains procedures for estimating the Presumptively Acceptable Impact Levels (PAILs). PAILs are 1/100th of the Threshold Limit Value (TLV) for the pollutant emitted.

Air Toxics Analysis Results for Formaldehyde		
Averaging Period	**Maximum Concentration ($\mu g/m^3$)**	**Maximum Allowed Concentration ($\mu g/m^3$)**
24-Hour	**0.61**	**15.0**

Preliminary Impact Analysis

A preliminary impact analysis was performed to determine if significance impacts occur and to define the impact area that they occur in. This information was then used as a basis for the NAAQS analysis and the PSD increment-consuming analysis.

At this facility, PM_{10}, CO, and NO_X emission rates exceed the PSD significant emission rate levels. Therefore, a significant impact analysis was performed for PM_{10}, CO, and NO_X to determine whether the emissions result in impacts in excess of the PSD modeling significance levels. The results were also compared to the EPA monitoring deminimis levels to determine if pre-construction monitoring is required.

Results indicated that PM_{10} impacts exceeded modeling and monitoring significance levels. NO_X impacts exceeded the modeling significance level, but did not exceed the monitoring significance level. CO emissions were below modeling and monitoring significance levels. Monitoring data from El Dorado was used for monitoring data.

The maximum concentration results and the significance levels for PM_{10}, CO, and NO_X are included in the following tables.

Significant Impact Analysis Modeling

Pollutant	Maximum Concentration Results ($\mu g/m^3$)			
	Annual	**24-Hour**	**8-Hour**	**1-Hour**
PM_{10}	5.84	35.4	-	-
CO	-	-	21.1	53.7
NO_X	1.10	-	-	-

Significant Impact Analysis Modeling				
Pollutant	**Modeling Significance Levels ($\mu g/m^3$)**			
	Annual	**24-Hour**	**8-Hour**	**1-Hour**
PM_{10}	1.0	5.0	-	-
CO	-	-	500.0	2000.0
NO_X	1.0	-	-	-

Significant Impact Analysis Modeling				
Pollutant	**Monitoring Significance Levels ($\mu g/m^3$)**			
	Annual	**24-Hour**	**8-Hour**	**1-Hour**
PM_{10}	-	10.0	-	-
CO	-	-	575.0	-
NO_X	14.0	-	-	-

NAAQS Analysis

The NAAQS are the maximum concentrations, measured in terms of the total concentration of pollutant in the atmosphere. In the NAAQS analysis, GP's emissions were combined with those from other nearby sources that have the potential to contribute significantly to the receptors within the radius of impact (ROI). This analysis was performed for PM_{10} and NO_X. Source data on all permitted sources within 50 km of the impact areas was requested from the Arkansas Department of Pollution Control and Ecology.

The highest results of the NAAQS Analysis for PM_{10} and NO_X are contained in the following tables.

NAAQS Analysis Results for PM_{10}				
Averaging Period	**Maximum Concentration ($\mu g/m^3$)**	**Background ($\mu g/m^{3)}$**	**Total ($\mu g/m^3$)**	**NAAQS ($\mu g/m^3$)**
Annual	10.0	25.00	35.00	50.0
24-Hour	67.1	57.00	124.1	150.0

NAAQS Analysis Results for NO_X				
Averaging Period	**Concentration ($\mu g/m^3$)**	**Background ($\mu g/m^{3)}$**	**Total ($\mu g/m^3$)**	**NAAQS ($\mu g/m^3$)**
Annual	3.86	21.00	24.86	100.0

11. CALCULATIONS:

SN	Emission Factor Source (AP-42, Testing, etc)	Emission Factor and units (lbs/ton, lbs/hr, etc)	Control Equipment Type (if any)	Control Equipment Efficiency	Comments (Emission factor controlled/uncontrolled, etc)
01	Testing AP-42	14.89 lb/hr PM 25.25 lb/hr VOC 6.72 lb/hr CO 14.66 lb/hr NOX 0.37 lb/hr Formald 0.15 lb/ton	RTO	85 90 75 add 10 ppm 90 -	-
02	Testing	2.83 lb/hr PM 20.05 lb/hr VOC 7.25 lb/hr CO 10.73 lb/hr NOX 0.24 lb/hr Formald	RTO	75 90 - - 98	-
03	AP-42	0.01 Gr/dscf	Bag Filter	99.96	-
04	AP-42	0.01 Gr/dscf	Bag Filter	99.73	-
05	AP-42	0.01 Gr/dscf	Bag Filter	98.67	-
06	AP-42	0.01 Gr/dscf	Bag Filter	99.74	-
07	AP-42	0.01 Gr/dscf	Bag Filter	99.96	-
08	AP-42	0.01 Gr/dscf	Bag Filter	99.28	-
09	AP-42	0.01 Gr/dscf	Bag Filter	99.96	-
10	AP-42	Various Factors	-	-	-

12. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
01	PM10 NOX CO VOC Formaldehyde Opacity	5 7E 10 25A Acetylacetone 9	First 90 Days and Each Year	Basis for calculations
02	PM10 NOX CO VOC Formaldehyde Opacity	5 7E 10 25A Acetylacetone 9	First 90 Days and Each Year	Basis for calculations

13. MONITORING OR CEMS

The following are parameters that must be monitored with CEMs or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

Continuous Monitoring of RTO Temperature, Inlet Flow, and Static Pressure.

*** Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)**
**** Indicates whether the parameter needs to be included in reports.**

14. RECORD KEEPING REQUIREMENTS

The following are items (such as throughput, fuel usage, VOC content of coating, etc) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

PW Conditions 6,7,8,9, 10, and 11 are records of the continuous monitoring.

15. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
01	5	Department Guidance.	Weekly
02	5	Department Guidance.	Weekly
03	5	Department Guidance.	Weekly
04	5	Department Guidance.	Weekly
05	5	Department Guidance.	Weekly
06	5	Department Guidance.	Weekly
07	5	Department Guidance.	Weekly
08	5	Department Guidance.	Weekly
09	5	Department Guidance.	Weekly
10	5	Department Guidance.	Weekly

16. DELETED CONDITIONS:

The following Specific Conditions were included in the previous permit, but deleted for the current permitting action.

There are no deleted conditions.

17. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

List all active permits for this facility which are voided/superseded/subsumed by issuance of this permit.

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18. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

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Thomas Rheaume, P.E.