STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1803-AOP-R13 AFIN: 07-00212

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Georgia-Pacific Wood Products, LLC (Fordyce OSB)
#1 Georgia-Pacific Road
Fordyce, Arkansas 71742

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Reconstituted Wood Product Manufacturing
NAICS Code: 321219

5. SUBMITTALS:

1/5/2014 and 4/14/2014

6. REVIEWER'S NOTES:

In this permit modification, the following minor modifications are put into the permit: replacement of an existing slat conveyor that feeds debarked logs to the #3 Flaker Line with an alignment conveyor and addition of a new product named Force Field. The facility's permitted annual emissions are increasing by 0.1 tpy VOC.

7. COMPLIANCE STATUS:

As of June 2, 2014, there are no compliance issues with the facility.

8. PSD APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

b) Is the facility categorized as a major source for PSD? Y

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list, or*

- *CO_2e potential to emit ≥ 100,000 tpy and ≥100 tpy/≥250tpy of combined GHGs?*

If yes, explain why this permit modification is not PSD. The increase in VOC emission is below the PSD significance threshold.

9. GHG STATUS:

Indicate one:

☒ Facility is classified as a major source for GHG and the permit includes this designation

☐ Facility does not have the physical potential to be a major GHG source

☐ Facility has restrictions on GHG or throughput rates that limit facility to a minor GHG source. Describe these restrictions: _____

10. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
Facility	PM/PM_{10}, VOC, CO and NO_X	PSD
Facility	HAPs	NESHAP Subpart DDDD
15	HAPs	NESHAP Subpart QQQQ
17 & 18	HAPs	NESHAP Subpart ZZZZ
18	-	NSPS Subpart JJJJ

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. NAAQS EVALUATIONS AND NON-CRITERIA POLLUTANTS:

a) NAAQS:

Pursuant to Act 1302 of the Regular Session of the 89th General Assembly of the State of Arkansas, no dispersion modeling was performed by ADEQ because it was not voluntarily proposed and agreed to by the facility. No other information was submitted by the applicant. Criteria pollutants were not evaluated for impacts on the NAAQS.

b) Non-Criteria Pollutants:

Non-criteria pollutant evaluation was taken from permit #1803-AOP-R11. No new evaluation was done.

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m^3), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Acetaldehyde	45.04	4.9544	8.01	N
Acrolein	0.23	0.0253	1.95	N
Benzene	1.60	0.176	0.56	N
Cadmium	0.002	0.0002	0.03	N
Formaldehyde	15	1.65	7.15	N
Hexane	176.24	19.3864	0.74	Y
Methanol	262.09	28.8299	16.64	Y
Phenol	19.25	2.1175	2.71	N
POM	0.20	0.022	0.02	Y
Propionaldehyde	47.53	5.2283	0.72	Y
Styrene	85.202	9.372	0.05	Y
Toluene	75.362	8.290	0.31	Y
Arsenic	0.01	0.0011	5.29e-3	N
Beryllium	5.0e-5	5.5e-6	2.64e-4	N
Chromium, hexavalent	0.01	0.0011	8.40e-4	Y
Manganese	0.2	0.022	0.39	N
Mercury	0.01	0.0011	8.55e-4	Y
Vinyl Acetate	35.21	3.8731	1.24	Y
Acetone	1187.12	130.5832	1.40	Y

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Ammonia	17.41	1.915	1.30	Y

2nd Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL ($\mu g/m^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu g/m^3$)	Pass?
Acetaldehyde	450.41	43.1	Y
Acrolein	2.3	0.15	Y
Benzene	15.98	0.04	Y
Cadmium	0.02	0.0073	Y
Formaldehyde	15.0*	10.528	Y
Phenol	192.5	0.559	Y
Arsenic	0.1	0.00041	Y
Beryllium	5.0e-4	2.0e-5	Y
Manganese	2.0	0.03	Y

*Surrogate screening value adopted by ADEQ (Steve Patrick memo of 10/19/1998).

13. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01 OSB 5 Dryers	NCASI January 2011 Wood Products Database	<u>Units in lb/ODT</u> CPM: 0.078 SO_2: 0.019 Acetaldehyde: 0.084	2 RTOs & multiclones	85% (PM/PM_{10}) 90% (VOC)	600 MMSF/yr production 158,700 oven-dried flakes

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		Acetone: 0.011 Acrolein: 0.023 Benzene: 0.0052 Cadmium: 4.44e-6 Chromium: 9.34e-5 Manganese: 7.56e-5 Methanol: 0.056 Phenol: 0.0247 Propionaldehyde: 0.0090 Toluene: 0.0036		40% (CO) 90% (HAPs)	(OD) lb/hr 1,390,018,000 OD lb/yr 33 MMBtu/hr Natural Gas dryers
	Maximum of 2004 and 2008 stack tests	FPM/FPM_{10}: 0.643 lb/ODT NOx: 0.854 lb/ODT CO: 1.6 lb/ODT Formaldehyde: 0.051 lb/ODT			
01 Natural Gas Emissions	AP-42, Table 1.4-2	0.6 lb/MMscf SO_2			
	AP-42, Table 1.4-3	2.1E-03 lb/MMscf Benzene 7.5E-02 lb/MMscf CH_2O 1.8 lb/MMscf Hexane			
	AP-42, Table 1.4-4	1.1E-03 lb/MMscf Cadmium			
01 Wood Residuals	AP-42, 1.6	<u>Units in lb/MMBtu</u> PM/PM_{10}: 0.56 NOx: 0.22 SO_2: 0.025 CO: 0.60 VOC: 0.039 Acetaldehyde: 8.3e-4 Acetone: 1.9e-4 Acrolein: 4.0e-3 Benzene: 4.2e-3 Formaldehyde: 4.4e-3 Phenol: 5.1e-5 Propionaldehyde: 6.1e-5 Styrene: 1.9e-3 Toluene: 9.2e-4 Arsenic: 2.2e-5			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		Beryllium: 1.1e-6 Cadmium: 4.1e-6 Chromium, hexavalent: 3.5e-6 Manganese: 1.6e-3 Mercury: 3.5e-6			
01A	AP-42, Table 1.4-1	100 lb/MMscf NO_X 84 lb/MMscf CO	None	N/A	N/A
	AP-42, Table 1.4-2	7.6 lb/MMscf PM/PM_{10} 0.6 lb/MMscf SO_2 5.5 lb/MMscf VOC			
	AP-42, Table 1.4-3	2.1E-03 lb/MMscf Benzene 7.5E-02 lb/MMscf CH_2O 1.8 lb/MMscf Hexane			
	AP-42, Table 1.4-4	1.1E-03 lb/MMscf Cadmium			
02 OSB Press	AP-42, Table 10.6.1-4	0.11 lb/MSF PM/PM_{10}	Multiclones RTO/TCO	75% (PM) 90% (VOC) 75% (CO)	@8,760 hrs/yr Maximum Annual OSB Throughput = 600,000 million SF/yr Maximum Hourly Throughput = 77,200 SF/hr = 77.2 MSF/hr Safety Factor = 1.2 for OSB press and OSB RTO Press RTO – 12
	AP-42, Table 10.6.1-5	0.0014 lb/MSF NO_X 0.0026 lb/MSF CO			
	AP-42, Table 10.6.1-6	0.21 lb/MSF VOC 0.0052 lb/MSF Acetaldehyde 0.0035 lb/MSF Acetone 0.044 lb/MSF CH_2O 0.50 lb/MSF Methanol 0.072 lb/MSF Phenol			
02 RTO (Natural Gas)	AP-42, Table 1.4-1	100 lb/MMscf NO_X 84 lb/MMscf CO			
	AP-42, Table 1.4-2	7.6 lb/MMscf PM/PM_{10} 0.6 lb/MMscf SO_2 5.5 lb/MMscf VOC			
	AP-42, Table 1.4-3	2.1E-03 lb/MMscf Benzene 7.5E-02 lb/MMscf CH_2O 1.8 lb/MMscf Hexane			
	AP-42, Table 1.4-4	1.1E-03 lb/MMscf Cadmium			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
					MMBTU/hr = 0.0118 MMscf/hr
02 OSB Press	Manufacturer's Info	Force Field component MSDS		95.21% (VOC)	20 MMSF production
03	Air Flow	13,623 dscfm 0.01 grains/dscf	Receiver Bag Filter	80.00% for PM/PM_{10} 99.96% for PM/PM_{10}	Screen Fines/ Saw Trim Transfer Pnuematics Calculations were provided for both Throughput and Air flow/Grain loading. The maximum emissions were used. @8,760 hrs/yr Safety Factor 1.2
	Throughput	145,208 tpy 33,152 lb/hr 77.2 MSF/hr			
	AP-42, Table 10.6.1-7 (03/2002) Raw Fuel Bin	0.06 lb/MSF VOC 0.0003 lb/MSF CH_2O 0.0015 lb/MSF Acetone 0.0015 lb/MSF Methanol			
04	Throughput	6,203 lb/hr	Receiver Bag Filter	80.00% for PM/PM_{10} 99.83% for PM/PM_{10}	
05	Air flow/ Grain loading	33,800 dscfm 0.01 grain/dscf	Receiver Bag Filter	80.00% for PM/PM_{10} 99.83% for PM/PM_{10}	
06	Air flow/ Grain loading	15,175 dscfm 0.01 grain/dscf	Receiver Bag Filter	80.00% for PM/PM_{10} 99.88% for PM/PM_{10}	
	Throughput	23,315 tpy 5,323 lbs/hr 77.2 MSF/hr			
	AP-42, Table 10.6.1-7 (03/2002) Sanderdust Metering Bin	0.12 lb/MSF VOC 0.00073 lb/MSF Methanol			
07	Throughput	23,315 tpy	Receiver	80.00% for	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		5,323 lb/hr 77.2 MSF/hr	Bag Filter	PM/PM_{10} 99.96% for PM/PM_{10}	
	AP-42, Table 10.6.1-7 (03/2002) Sanderdust Metering Bin	0.12 lb/MSF VOC 0.00073 lb/MSF Methanol			
08	Air flow/ Grain loading	14,248 dscfm 0.01 grain/dscf	Receiver Bag Filter	80.00% for PM/PM_{10} 99.46% for PM/PM_{10}	
09	Throughput	33,152 lb/hr	Receiver Bag Filter	80.00% for PM/PM_{10} 99.96% for PM/PM_{10}	
10	Production	134.5 tons logs/hr Debarker 13.45 tons bark/hr Bark Hog	None	N/A	Assume bark equals 10% by weight of total logs
	AP-42	0.024 lb/ton PM 0.011 lb/ton PM_{10}			
11 Paint / Ink	Inside Spray Booth	8.5 lb/gal 85,324 gal/yr	None	54% (solids content) 30% (exhaust) 98% (filter efficiency)	
	Outside Spray Booth	8.5 lb/gal 7,833 gal/yr		66% (solids content) 60% (sprayer transfer efficiency) 75% (reduction from building enclosure)	
	Testing	8.5 lb/gal Paint/Ink Density 0.31 lb/gal VOC 0.085 lb/gal HAPs 0.085 lb/gal Ammonia		Total emissions are sum of painting inside and outside spray booth VOC content determined from Highest 0.31 lb VOC/gallon Paint Safety Factor – +20%	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)			Control Equipment	Control Equipment Efficiency	Comments
12 Roads	AP-42, Section 13.2.1 Paved Roads	PM PM_{10}	sL 0.74 0.74	k 0.011 0.0022	Sweeping, water truck, speed limits	N/A	@365 days/yr 334.3 mile/day 122,006.5 mile/yr No rain
	AP-42, Section 13.2.2 Unpaved Roads and measured silt data	PM PM_{10}	sL 1.5 1.5	k 4.9 1.5			@365 days/yr 82.9 mile/day 30,243.9 mile/yr 105 days rain
13	NCASI TB 424 Section 13.2.4	8.150 lb PM/day/acre 0.650 acre 7.5% silt # dry days: 260 days/yr % Time Wind = 13			None	N/A	Outside Bark Storage
14	OSHA Testing indicates 0.21 ppm VOC/HCHO	0.21 ppm VOC 0.21 ppm CH_2O Fan Speed 1 @40,000 acfm 6 @48,356 acfm max total fan flow = 330,136 acfm HCOC 0.3476 lb/hr or 1.523 tpy non-point sources in whse			None	N/A	Fin Prod Storage Assume Formaldehyde concentration the same as VOC. VOC conc = 0.21 $ft^3/MMft^3$ Fan Speed = 0.330136 $MMft^3/min$
15	Throughput	1125 lb adhesive/hour			None	N/A	Overlay Application Max op speed 120 ft/m (900 panels/hr) @ 1.25 lbs adhesive/panel @8760 hr/yr
	Production	0.22% by wt content VOC 0.11% by wt Acetaldehyde 0.03% by wt CH_2O 0.07% by wt Methanol 0.11% by wt Vinyl Acetate					
16	Throughput	77.2 MSF/hr			None	N/A	Blender

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	AP-42, Table 10.6.1-7 (03/2002) Blender PF & MDI	0.16 lb/MSF VOC 0.0018 lb/MSF Acetone 0.0036 lb/MSF CH_2O 0.063 lb/MSF Methanol			@8,760 hrs/yr Safety Factor = 1.2
17	Throughput	500 hrs/yr	None	N/A	Diesel-fired Emergency Generator
	AP-42, Section 3.3	7,000 Btu/hp-hr			
	AP-42, Table 3.3-1	0.0022 lb/hp-hr PM/PM_{10} 0.00205 lb/hp-hr SO2 0.00247 lb/hp-hr VOC 0.00668 lb-hp-hr CO 0.031 lb/hp-hr NO_X			
	AP-42, Table 3.3-2	<u>HAPs</u> 7.67E-04 lb/MMBtu Acetaldehyde 9.25E-04 lb/MMBtu Acrolein 9.33E-04 lb/MMBtu Benzene 0.00118 lb/MMBtu CH2O 0.000168 lb/MMBtu POM			
18	40 CFR 90.103	CO: 519 g/kW-hr NOx: 13.4 g/kW-hr	None	N/A	17 kW 0.23 MMBtu/hr 500 hr/yr
	AP-42 3.2-3	<u>Units in MMBtu/hr</u> PM/PM_{10}: 0.1941 SO_2: 0.000588 VOC: 0.0296 Acetaldehyde: 0.00279 Acrolein: 0.00263 Benzene: 0.00158 Formaldehyde: 0.0205 Methanol: 0.00306 POM: 0.000141			

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
01	RTO A and RTO B Minimum Temperatures - 1550°F and 1552°F respectively Subsequent performance test that demonstrates compliance with permit may change the minimum operating temperature	CEM	At least every 15 minutes & reduce the data to 3-hour block average to confirm compliance with minimum temps	Y
01	Isolation Damper	CEM	As occurs changes in damp position: “Open” or “Closed”	N
02	RTO Minimum Temperature [1498 °F] TCO Minimum Temperature [1250 °F] Subsequent performance test that demonstrates compliance with permit may change the minimum operating temperature	CEM	At least every 15 minutes & reduce data to 3-hour block average to confirm compliance w/minimum temp TCO not operating currently.	Y

15. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
01	RTO A and RTO B Minimum Temperatures - 1550°F and 1552°F respectively Subsequent performance test that demonstrates compliance with permit may change the minimum	CEM	At least every 15 minutes & reduce the data to 3-hour block average to confirm compliance with minimum temps	Y

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
	operating temperature			
01	Isolation Damper	CEM	As occurs changes in damp position: "Open" or "Closed"	N
02	RTO Minimum Temperature [1498 °F] TCO Minimum Temperature [1250 °F] Subsequent performance test that demonstrates compliance with permit may change the minimum operating temperature	CEM	At least every 15 minutes & reduce data to 3-hour block average to confirm compliance w/minimum temp TCO not operating currently.	Y

16. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
Facility	OSB Throughput	600 MMSF/yr on a 3/8-inch basis OSB	Monthly and 12 rolling months	Y
01 & 02 RTO	Performance Tests	$PM_{10,}$ VOC, $NO_{X,}$ and formaldehyde (one of 2 RTOA/B with 5 dryers operating)	Every 5 years Keep latest test	Y entire report
01 & 02 RTO	Performance Tests	CO (both RTO A & B separately with 5 dryers operating @90%+)	Every 5 years Keep latest test	Y entire report
01, 02	SSM Plan, SAM Reports and immediate reports of malfunctions	Report malfunctions (Submit start-up, shutdown & malfunction events inconsistent with SSM Plan) Keep current SSM Plan onsite and keep revised SSM Plans for 5 years	Every 6 months	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
01	Minimum Operating Temperature of RTO A & RTO B	Based on Minimum Temperature recorded during March 2008 performance test, 1550 °F and 1552 °F, respectively, until subsequent tests establish new minimum temp.	Every 15 minutes & reduce the data to 3-hour block average, Record Daily	N
01 & 02	Inlet Fan Static Pressure readings	n/a	Recorded hourly and averaged every 12 hours.	N
01A	Venting to Atmosphere and Fuel used	Only Natural Gas allowed to vent directly to atmosphere	As occurs	N
02	Minimum Operating Temperature of TCO & RTO	Based on Minimum Temperature recorded during March 2004 on TCO performance test , 1250 °F and March 2008 on RTO performance test, 1498 °F, until subsequent tests establish new minimum temp.	Every 15 minutes & reduce the data to 3-hour block average, Record Daily	N
11	VOC emitted & MSDS or equivalent documentation	17.4 tpy	Monthly	N
		0.31 VOC/gal	On going	
	Use only non-HAP coatings (see SC #67) & MSDS or equivalent documentation	Non-HAP coating is defined as coating with HAP contents below 0.1% by mass for OSHA defined carcinogens as specified in 29 CFR 1910.1200(d)(4), and below 1.0% by mass for other HAP compounds.	As necessary	
	MSDS or equivalent documentation of SN-11 ammonia containing materials	Ammonia content of material not to exceed one percent (1.0%) by weight	Ongoing	

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	Add recordkeeping of HAPs at SN-11	Must be below reportable threshold limit values (TLVs) and below de minimis levels	Record 2011 one time and keep on-site	
11	Notification	According to the schedule in 40 CFR §63.2280 and according to 40 CFR Part 63, Subpart A	Ongoing	Y
15	If the affected source applies coating to products in the following subcategory: 1. Exterior Siding and Primed Doorskins 2. Flooring 3.Interior Wall Paneling or Tileboard 4.Other Interior Panels 5. Doors, Windows, and Miscellaneous	Must limit organic HAP emissions to the atmosphere to no more than the applicable emission limit(s) in the following table in grams HAP/liter solids (lb HAP/gal solids) is 1. 7 (0.06) 2. 93 (0.78) 3. 183 (1.53) 4. 20 (0.17) 5. 231 (1.93)	Monthly and 12 month rolling	N
15	VOC Acetaldehyde Formaldehyde Methanol Vinyl Acetate [May be MSDS sheets & spreadsheet]	Shall not exceed following Content Limit VOC -0.22 % by weight Acetaldehyde - 0.11 % by weight Formaldehyde -0.03 % by weight Methanol - 0.07 % by weight Vinyl Acetate - 0.11% by weight	Monthly	N
17	Operating Hours of Diesel Generator	Nte 500 operating hours per rolling 12 months, based on non-resettable hour meter	Monthly	N
18	Hours of Operation	Nte 500 operating hours per rolling 12 months, based on non-resettable hour meter	As Necessary	N
Plantwide	Force Field Production	20 MMSF, on a 3/8-inch basis per rolling 12-month period	Monthly	N

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 and 02	10%	§18.501 and A.C.A.	Weekly Observations

SN	Opacity	Justification for limit	Compliance Mechanism
01 and 02	20%	§19.503 and A.C.A.	Daily Observation During "Bakeout"
03 thru 09	10%	§18.501 and A.C.A.	Weekly Observations
10	20%	§19.503 and A.C.A.	Weekly Observations
12 (off-site)	5%	A.C.A.	Water sprays, etc
13	20%	§19.503 and A.C.A.	None
17	20%	§19.503and A.C.A.	Use of diesel fuel only
18	5%	§18.501 and A.C.A.	Use of propane as fuel

18. DELETED CONDITIONS:

Former SC	Justification for removal
None	

19. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group	Emissions (tpy)						
		PM/ PM_{10}	SO_2	VOC	CO	NO_X	HAPs	
							Single	Total
Portable Heaters	A-1	---	0.17	0.018	0.012	0.043	--	--
Coolant Tank	A-2	--	--	0.0001	--	--	--	--
Used Oil Tank	A-2	--	--	0.0008	--	--	--	--
Diesel Fueling Tank	A-3	--	--	0.002	--	--	--	--
Emergency Generator Diesel Tank	A-3	--	--	0.001	--	--	--	--
Fire Pump Diesel Tank	A-3	--	--	0.004	--	--	--	--
Kerosene Tank	A-3	--	--	0.0008	--	--	--	--
Thermal Oil Tank	A-3	--	--	0.0008	---	--	--	--
Maintenance Welding and Cutting	A-7	0.125	--	--	--	--	--	0.069

Source Name	Group	Emissions (tpy)						
		PM/ PM_{10}	SO_2	VOC	CO	NO_X	HAPs	
							Single	Total
Gasoline Fueling Tank	A-13			0.25				
Emergency Fire Pump	A-13	0.12	0.12	0.14	0.38	1.74		0.003

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
1803-AOP-R12

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 11-06-13

Facility Name: Georgia-Pacific Wood Products, LLC
d/b/a/ Fordyce OSB
Permit Number: 1803-AOP-R13
AFIN: 07-00212

$/ton factor	23.42	Annual Chargeable Emissions (tpy)	2042.2
Permit Type	Minor Mod	Permit Fee $	500

Minor Modification Fee $	500
Minimum Modification Fee $	1000
Renewal with Minor Modification $	500
Check if Facility Holds an Active Minor Source or Minor Source General Permit	☐
If Hold Active Permit, Amt of Last Annual Air Permit Invoice $	0
Total Permit Fee Chargeable Emissions (tpy)	0.1
Initial Title V Permit Fee Chargeable Emissions (tpy)	

HAPs not included in VOC or PM: *Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride*

Air Contaminants: *All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensible PM, H2S in TRS, etc.)*

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM		564.1	564.1	0	0	564.1
PM_{10}		516.8	516.8	0		
SO_2		34.4	34.4	0	0	34.4
VOC		1010.2	1010.3	0.1	0.1	1010.3
CO		950.8	950.8	0		
NO_X		424	424	0	0	424
Acetaldehyde	☐	35.09	35.09	0		
Acrolein	☐	8.52	8.52	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Benzene	☐	2.29	2.29	0		
Cadmium	☐	0.03	0.03	0		
Formaldehyde	☐	30.77	30.77	0		
Hexane	☐	3.29	3.29	0		
Methanol	☐	69.44	69.44	0		
Phenol	☐	11.83	11.83	0		
POM	☐	0.03	0.03	0		
Propionaldehyde	☐	3.15	3.15	0		
Styrene	☐	0.2	0.2	0		
Toluene	☐	1.36	1.36	0		
Arsenic	☐	2.32E-02	2.32E-02	0		
Beryllium	☐	1.16E-03	1.16E-03	0		
Chromium, hexavalent	☐	3.68E-03	3.68E-03	0		
Manganese	☐	1.71	1.71	0		
Mercury	☐	3.74E-03	3.74E-03	0		
Vinyl Acetate	☐	5.43	5.43	0		
Combined HAPs	☐	4	4	0		
Acetone	☑	5.4	5.4	0	0	5.4
Ammonia	☑	4	4	0	0	4
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		