### STATEMENT OF BASIS

For the issuance of Air Permit # 1803-AOP-R20 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 ManufacturingNAICS Code:321219

### 5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
3/20/2019	Minor Mod	New insignificant activity
3/20/2019	Modification	Updated calculations for SN-01

### 6. **REVIEWER'S NOTES**:

With this modification, the facility is updating emission calculations and permitted emission rates for SN-01. The proposed change made in permit 1803-AOP-R11 to replace the 40 MMBtu/hr natural gas burner with two (2) 16.5 MMBtu/hr natural gas burners never occurred. Additionally, the updated calculations are correcting emission rates for the operating scenario when the five dryers and the thermal oil heaters are combusting wood. This modification also includes corrections to typographical errors and the addition of five (5) flake dryer bins as insignificant activities. The facility's

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permitted annual emissions are increasing by 0.34 tpy chlorine, 2.41 tpy hexane, and 8.00 tpy hydrochloric acid.

### 7. COMPLIANCE STATUS:

As of March 20, 2019, there are no compliance issues with the facility. Additionally, ECHO (<u>https://echo.epa.gov/detailed-facility-report?fid=AR0000000501300212</u>) found no CAA violations by the facility.

### 8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N If yes, were GHG emission increases significant?

- b) Is the facility categorized as a major source for PSD? Y
- Single pollutant  $\geq$  100 tpy and on the list of 28 or single pollutant  $\geq$  250 tpy and not on list

If yes for 8(b), explain why this permit modification is not PSD. This permit does not include a major modification as defined by 40 CFR §52.21(b)(2).

### 9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
Facility	PM/PM <sub>10</sub> , VOC, CO and NO <sub>X</sub>	PSD
Facility	HAPs	NESHAP Subpart DDDD
15	HAPs	NESHAP Subpart QQQQ
17, 18, 19	HAPs	NESHAP Subpart ZZZZ
18	_	NSPS Subpart JJJJ
01A	_	NESHAP DDDDD

### 10. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N (Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Regulation 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit? If not, explain why.

For any requested inapplicable regulation in the permit shield, explain the reason why it is not applicable in the table below.

Source	Inapplicable Regulation	Reason			
N/A					

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### 11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

### 12. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the ADEQ Air Permit Screening Modeling Instructions.

- b) Non-Criteria Pollutants:
- 1<sup>st</sup> 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<sup>3</sup>), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m <sup>3</sup> )	$PAER (lb/hr) = 0.11 \times TLV$	Proposed lb/hr	Pass?
Lead	0.05	0.006	0.03	Ν
Acetaldehyde	45.04	4.9544	8.30	Ν
Acrolein	0.23	0.0253	2.85	Ν
Benzene	1.60	0.176	1.50	Ν
Chlorine	1.45	0.160	0.27	Ν
Formaldehyde	15	1.65	4.85	Ν
Hexane	176.24	19.3864	0.82	Y
Hydrochloric acid	2.983	0.328	6.39	Ν
Methanol	262.09	28.8299	16.87	Y
Phenol	19.25	2.1175	3.72	Ν

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Pollutant	TLV (mg/m <sup>3</sup> )	$\begin{array}{l} \text{PAER (lb/hr)} = \\ 0.11 \times \text{TLV} \end{array}$	Proposed lb/hr	Pass?
Propionaldehyde	47.53	5.2283	0.92	Y
Styrene	85.202	9.372	0.46	Y
Toluene	75.362	8.290	0.62	Y
Vinyl Acetate	35.21	3.8731	1.13	Y
Arsenic	0.01	0.0011	5.31E-03	Ν
Beryllium	5.0E-05	5.5E-06	2.64E-03	Ν
Cadmium	0.002	0.0002	1.01E-02	Ν
Manganese	0.2	0.022	0.41	Ν
Mercury	0.01	1.10E-03	1.22E-03	Ν
Acetone	1187.12	130.5832	2.57	Y
Ammonia	17.41	1.915	3.00	Ν

2<sup>nd</sup> 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.

Emissions from emergency sources are not included in the model.

Pollutant	PAIL $(\mu g/m^3) = 1/100$ of Threshold Limit Value	Modeled Concentration $(\mu g/m^3)$	Pass?
Lead	0.5	0.026	Y
Acetaldehyde	450.41	31.76	Y
Acrolein	2.3	0.304	Y
Benzene	15.98	0.139	Y
Chlorine	14.5	0.0273	Y
Formaldehyde	15.0*	10.528	Y

Pollutant	PAIL $(\mu g/m^3) = 1/100$ of Threshold Limit Value	Modeled Concentration $(\mu g/m^3)$	Pass?
Hydrochloric acid	29.83	0.646	Y
Phenol	192.5	1.369	Y
Arsenic	0.1	4.7E-04	Y
Beryllium	5.0e-4	3.0E-04	Y
Cadmium	0.02	1.14E-03	Y
Manganese	2.0	0.039	Y
Mercury	0.1	0.00012	Y
Ammonia	174.1	65.76	Y

# c) H<sub>2</sub>S Modeling:

This facility does not have any H<sub>2</sub>S emissions.

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	Stack Testing (March 2008 and Feb 2013)	$\frac{\text{Units in lb/ODT}}{\text{PM (filterable): } 3.96e-1}$ $\text{PM (condensable): } 3.94e-1$ $\text{PM}_{10}: 7.9e-1$ $\text{NOx: } 8.03e-1$ $\text{CO: } 4.94e-1$ $\text{VOC: } 2.01e-1$		85% (PM/PM <sub>10</sub> ) 90%	<u>Production</u> 695,009 ODT/yr 79.34 ODT/hr <u>Dryer (Wood)</u> 1,752,000 MMBtu/yr
	NCASI WoodSO2: 1.9e-2 lb/ODTProducts (FebLead: 7.16e-5 lb/ODT2013)Various HAPs	b/ODT multiclones	(VOC) 40% (CO)	200 MMBtu/hr <u>Dryer (NG)</u> 1,718 MMscf/yr	
01 Natural Gas Emissions	AP-42, 1.4	SO <sub>2</sub> : 0.72 lb/MMscf Lead: 6.0e-4 lb/MMscf Various HAPs		90% (HAPs)	0.196 MMscf/hr <u>TOH (Wood)</u> 700,800
01 Wood	AP-42, 1.6	Lead: 5.76e-5 lb/MMBtu Various HAPs			MMBtu/yr 80 MMBtu/hr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
Residuals					TOH (NG) 515 MMscf/yr 0.059 MMscf/hr <u>RTO (NG)</u> 412 MMscf/yr 4.7E-2 MMscf/hr 20% Safety Factor
01A	AP-42, 1.4	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	None	N/A	<u>Natural Gas</u> 515 MMscf/yr 5.88e-2 MMscf/hr 20% Safety Factor
02 OSB Press	Uncaptured Emissions NCASI Wood Products (Jan + Feb 2013)	<u>Units in lb/MSF</u> PM (filterable): 2.81e-1 PM (condensable): 2.76e-1 PM <sub>10</sub> /PM <sub>2.5</sub> : 5.57e-1 CO: 7.89e-2 NOx: 6.73e-2 VOC: 1.79 Various HAPs		75% (PM) 90%	600,000 MSF/yr
Captured Emissions NCASI Wood Products (Jan Feb 2013)		<u>Units in lb/MSF</u> PM (filterable): 3.3e-2 PM (condensable): 5.24 e-2 PM <sub>10</sub> /PM <sub>2.5</sub> : 8.53e-2 CO: 7.89e-2 NOx: 6.73e-2 VOC: 6.79e-2	Multiclones RTO/TCO	(VOC) 75% (CO) 95% capture efficiency	90 MSF/hr 103 MMscf/yr 0.0118 MMscf/hr 20% Safety Factor
02 RTO (Natural Gas)	AP-42, 1.4	0.72 lb/MMscf SO <sub>2</sub> Various HAPs			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
02 OSB Press	Manufacturer's Info	Force Field component MSDS		95.21% (VOC)	20 MMSF production
	Stack Testing (2005)	4.8e-1 lb/hr PM (filterable)		80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr
03	NCASI Wood Products (Feb 2013)	1.97e-3 lb/MSF PM (condensable) 7.05e-2 lb/MSF VOC Various HAPs	Bag Filter	99.96% for PM/PM <sub>10</sub>	13,623 dscfm 20% Safety Factor
	Stack Testing (2005)	1.5e-3 gr/dscf PM (filterable)	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr
04	NCASI Wood Products (Feb 2013)	1.97e-3 lb/MSF PM (condensable) 7.05e-2 lb/MSF VOC Various HAPs	Bag Filter	99.83% for PM/PM <sub>10</sub>	24,084 dscfm 20% Safety Factor
	Stack Testing (2005)	1.70e-3 gr/dscf PM (filterable)	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr
05	NCASI Wood Products (Feb 2013)	1.97e-3 lb/MSF PM (condensable) 7.05e-2 lb/MSF VOC Various HAPs	Bag Filter	99.83% for PM/PM <sub>10</sub>	33,800 dscfm 20% Safety Factor
	Stack Testing (2005)	3.0e-3 gr/dscf PM (filterable)	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr
06	NCASI Wood Products (Feb 2013)	icts (Feb (condensable) 7 05e-2 lb/MSE VOC		99.88% for PM/PM <sub>10</sub>	90 MSF/II 15,175 dscfm 20% Safety Factor
	Stack Testing (2005)	6.9e-3 gr/dscf PM	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr
07	AP-42, Table 10.6.1-7	1.45e-1 lb/MSF VOC 8.76e-4 lb/MSF Methanol	Bag Filter	99.96% for PM/PM <sub>10</sub>	835 dscfm 20% Safety Factor
08	Stack Testing (2005)	5.3e-3 gr/dscf PM (filterable)	Receiver	80.00% for PM/PM <sub>10</sub>	695,009 ODT/yr 79 ODT/hr
08	NCASI Wood Products (Feb	4.7e-3 lb/ODT PM (condensable)	Bag Filter	99.46% for	600,000 MSF/yr 90 MSF/hr

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SN	Emission Factor Source (AP-42, testing, etc.)		ssion Facto n, lb/hr, etc		Control Equipment	Control Equipment Efficiency	Comments
	2013)	Various HAPs				PM/PM <sub>10</sub>	14,248 dscfm 20% Safety
	AP-42, 10.6	6.84e-2	2 lb/MSF V	OC			Factor
09	Stack Testing (2005)	3.2e-3 g	r/dscf PM/I	$PM_{10}$	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr 13,623 dscfm
09	AP-42, 10.6		lb/MSF V /MSF Meth		Bag Filter	99.96% for PM/PM <sub>10</sub>	20% Safety Factor
10	AP-42, 10.3	0.024 lb/ton PM 0.011 lb/ton PM <sub>10</sub>			None	N/A	Debarker throughput 1,178,220 ton logs/yr 135 ton logs/hr <u>Bark Hog</u> throughput 117,822 ton bark/yr 13 ton bark/hr
11 Inside Spray Booth	Technical Data Sheets	PM/PM <sub>10</sub> : 2.75e-2 lb/gal VOC: 3.1e-1 lb/gal Ammonia: 8.5e-2 lb/gal			Filter/ Enclosure	98%	85,324 gal/yr 0.18 gal/MSF 8.5 lb/gal 54% solids content 70% sprayer efficiency 20% Safety Factor
11 Outside Spray Booth	Technical Data Sheets	PM/PM <sub>10</sub> : 5.61e-1 lb/gal VOC: 3.1e-1 lb/gal Ammonia: 8.5e-2 lb/gal			Filter/ Enclosure	75%	7,833gal/yr 0.018 gal/MSF 8.5 lb/gal 66% solids content 60% sprayer efficiency 20% Safety Factor
12 Roads	AP-42, Section 13.2.1 Paved Roads	PM PM <sub>10</sub>	<u>sL</u> 0.74 0.74	<u>k</u> 0.011 0.0022	Sweeping, water truck, speed	N/A	@365 days/yr 334.3 mile/day 122,006.5

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)			Control Equipment	Control Equipment Efficiency	Comments
					limits		mile/yr No rain
	AP-42, Section 13.2.2 Unpaved Roads and measured silt data	PM PM <sub>10</sub>	<u>sL</u> 1.5 1.5	<u>k</u> 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 <sub>2</sub> O <u>Fan Speed</u> 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 <sup>3</sup> /MMft <sup>3</sup> Fan Speed = 0.330136 MMft <sup>3</sup> /min
15	MSDS	0.22% by wt content VOC 0.10% by wt Acetaldehyde 0.03% by wt CH <sub>2</sub> O 0.07% by wt Methanol 0.10% by wt Vinyl Acetate			None	N/A	7,884,000 panels/yr 900 panels/hr 1.25 lb adhesive/panel
	NCASI Wood Products (Feb 2013)	PM (filterable): 2.76e-3 lb/ODT PM <sub>10</sub> / PM <sub>2.5</sub> : 5.24e-3 lb/ODT :5.24e-3 lb/ODT Various HAPs				20% Safety Factor	
16	16 AP-42, Table 10.6.1-7 (03/2002) VOC: 1.92e-1 lb/MSF Blender PF & MDI		None	N/A	600,000 MSF/yr 90 MSF/hr 695,009 ODT/yr 79 ODT/hr		
17	AP-42, 3.4	Units	s in lb/HP-h	nr	None	N/A	20% Safety

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SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments	
		PM (filterable): 8.4e-4 PM (condensable): 5.39e-5 PM <sub>10</sub> / PM <sub>2.5</sub> : 8.94e-4 NOx: 2.88e-2 SO2: 1.46e-5 CO: 6.6e-3 VOC: 8.46e-3 Various HAPs			Factor 1,341 HP 9.4 MMBtu/hr 500 hr/yr	
	40 CFR 90.103	CO: 519 g/kW-hr NOx: 13.4 g/kW-hr			20% Safety Factor 17 kW 0.23 MMBtu/hr 500 hr/yr	
18	AP-42, 3.2-3	AP-42, 3.2-3 $ \begin{array}{c}             \underline{Units in lb/MMBtu} \\             PM/PM_{10}: 2.33e-1 \\             SO_2: 7.06e-4 \\             VOC: 3.55e-2 \\             Various HAPs \end{array} $		N/A		
19	AP-42, 3.3	<u>Units in lb/MMBtu</u> PM/PM <sub>10</sub> : 3.72e-1 NOx: 5.29 SO <sub>2</sub> : 3.48e-1 CO: 1.14 VOC: 4.32e-1 Various HAPs	None	N/A	20% Safety Factor 1.86 MMBtu/hr 266 HP 500 hr/yr	
	Wash Water Sample Analysis	TOC content: 1,668.82 mg/L	None	N/A	2,268,000 gal/yr capacity	
20	AP-42, 1.4	<u>Units in lb/MMscf</u> PM: 7.6 PM <sub>10</sub> : 5.7 NOx: 100 SO <sub>2</sub> : 0.6 CO: 84 VOC: 5.5	None	N/A	2.95 MMBtu/hr NG burner	

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#### 14. TESTING REQUIREMENTS:

SN **Pollutants** Test Method Test Interval Justification 5 or 201  $PM_{10}$ Every 5 years, 01,02 NO<sub>X</sub> 63 DDDD 7E alternate RTOs VOC [THC (as carbon)] 25A Every 5 years, each Basis for 01,02 CO 10 RTO Calculations If TCO is operated, 5 or 201  $PM_{10}$ then within 180 63 DDDD NO<sub>X</sub> 7E 02 days of operation, for CO basis 25A VOC [THC (as carbon)] per PWC #3, after of calc. 10 zco that every 5-yrs. 01,02 **Total HAPs** 25A Once IPT 9 01,02 Opacity Every 5 years 63 DDDD Acetylacetone Method; . . . Or other Basis for 01,02 Formaldehyde test method upon the Every 5 years Calculations Department's approval.

The permit requires testing of the following sources.

### 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 operating temperature	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)
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 <sub>10</sub> , VOC, NO <sub>X</sub> , 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
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	Every 15 minutes & reduce the data to 3-	Ν

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SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
		subsequent tests establish new minimum temp.	hour block average, Record Daily	
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	Ν
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
	VOC emitted & MSDS or equivalent	17.4 tpy	Monthly	
	documentation	0.31 VOC/gal	On going	
11	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	Ν
	MSDS or equivalent documentation of SN-11 ammonia containing materials	Ammonia content of material not to exceed one percent (1.0%) by weight	Ongoing	
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	Must limit organic HAP emissions to the atmosphere to no more than the applicable	Monthly and 12 month rolling	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	following subcategory:1. Exterior Siding and Primed Doorskins 2. Flooring 3.Interior Wall 	emission limit(s) in the following table <u>in grams</u> <u>HAP/liter solids (lb HAP/gal solids)</u> <u>is</u> 1. 0 (0.00) 2. 0 (0.00) 3. 5 (0.04) 4. 0 (0.00) 5. 57 (0.48)		
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	Hours of Operation	Nte 500 operating hours per calendar year, based on non-resettable hour meter	As Necessary	Ν
18	Hours of Operation	Nte 500 operating hours per calendar year, based on non-resettable hour meter	As Necessary	Ν
19	Hours of Operation	Nte 500 operating hours per calendar year, based on non- resettable hour meter	As Necessary	Ν

# 17. OPACITY:

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

SN	Opacity	Justification for limit	Compliance Mechanism
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
19	20%	§19.503and A.C.A.	Use of diesel fuel only
20	5%	§18.501 and A.C.A.	Use of natural gas as fuel

## 18. DELETED CONDITIONS:

Former SC	Justification for removal
	N/A

## 19. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

		Emissions (tpy)				(tpy)			
Source Name	Group	PM/ SO <sub>2</sub>	VOC	СО	NO	HAPs			
		PM <sub>10</sub>	$50_{2}$	VUC	0	NO <sub>X</sub>	Single	Total	
Portable Heaters	A-1	0.004	0.156	0.017	0.011	0.040			
Used Oil Tank (200 gal)	A-2			0.0009					
Diesel Fueling Tank (3,000 gal)	A-3			0.003					
Emergency Generator Diesel Tank (2,000 gal)	A-3			0.0009					
Fire Pump Diesel Tank (4,600 gal)	A-3			0.004					
Kerosene Tank (291 gal)	A-3			0.0009					
Thermal Oil Tank (1,000 gal)	A-3			0.0009					
Coolant Tote (451 gal)	A-3			0.0004					
Maintenance Welding and Cutting	A-7	0.125					0.07	0.07	
Gasoline Fueling Tank (600 gal)	A-13			0.25			0.25	0.25	
Two (2) MDI Resin Tank (20,000 gal)	A-13			2e-7			5e-7	5e-7	
Sanderdust Truck Loading	A-13	2.82e-3							

Source Name				Emi	ssions	(tpy)					
	Group	PM/	SO <sub>2</sub> VOC	СО	NO	HAPs					
		$PM_{10}$		VUC	CO	NO <sub>X</sub>	Single	Total			
Flake Dryer Bins (5)	A-13	0.061									

## 20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #	
1803-AOP-R19	

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

### Fee Calculation for Major Source

Facility Name: Georgia-Pacific Wood Products, LLC d/b/a/ Fordyce OSB Permit Number: 1803-AOP-R20 AFIN: 07-00212

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	2219.24
Permit Type	Modification	Permit Fee \$	1000
Minor Modification Fee \$ Minimum Modification Fee \$ Renewal with Minor Modification \$ Check if Facility Holds an Active Minor Source or Minor Source General Permit If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$ Total Permit Fee Chargeable Emissions (tpy) Initial Title V Permit Fee Chargeable Emissions (tpy)	500 1000 500 r 0 8.34		

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.)

Revised 03-11-16

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
РМ		566.6	566.6	0	0	566.6
PM <sub>10</sub>		519.3	519.3	0		
PM <sub>2.5</sub>		0	0	0		
SO <sub>2</sub>		34.7	34.7	0	0	34.7
VOC		1146.6	1146.6	0	0	1146.6
СО		952.5	952.5	0		
NO <sub>X</sub>		427.8	427.8	0	0	427.8
Lead		0.09	0.09	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Acetaldehyde		35.96	35.96	0		
Acrolein		12.34	12.34	0		
Benzene		6.38	6.38	0		
Chlorine		0.83	1.17	0.34	0.34	1.17
Formaldehyde		19.33	19.33	0		
Hexane		1.13	3.54	2.41		
Hydrochloric Acid		20	28	8	8	28
Methanol		61.65	61.65	0		
Phenol		14.89	14.89	0		
Propionaldehyde		3.82	3.82	0		
Styrene		2	2	0		
Toluene		2.57	2.57	0		
Vinyl Acetate		4.93	4.93	0		
Arsenic		0.05	0.05	0		
Beryllium		0.02	0.02	0		
Cadmium		0.07	0.07	0		
Manganese		1.7	1.7	0		
Mercury		0.03	0.03	0		
Combined HAPs		4.9	4.9	0		
Acetone	•	9.47	9.47	0	0	9.47
Ammonia	•	4.9	4.9	0	0	4.9
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