### STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1803-AOP-R21 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	Short Description of Any Changes		
	(New, Renewal, Modification,	That Would Be Considered New or		
	Deminimis/Minor Mod, or	<b>Modified Emissions</b>		
	Administrative Amendment)			
11/4/2019	Renewal	Updated emission calculations		
11/4/2019	Administrative Amendment	New IA		

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

This is a Title V renewal for this permit. With this renewal, the facility is making the following changes to the permit:

- Remove SN-14 as a permitted source. The facility claims that emissions do not occur from this area of the site and does not include this storage activity as an emission unit in permitting for other similar sites.
- Update the Insignificant Activities list.

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- Update the permitted emission rates to incorporate available condensable particulate and speciated VOC data.
- Change the frequency of the visible emission observation for SN-01, SN-02, SN-03 through SN-09, and SN-10 from weekly to monthly. Past records have demonstrated that the facility has not exceeded the opacity limit for these sources during routine observations.
- Change the daily visible emission observation for SN-01 and SN-02 during off-line maintenance activities to only be required during daytime. Maintenance activities are sometimes performed at night when visible emission observations are not possible.
- Include recordkeeping requirement for NSPS Dc for SN-01A.

This renewal also includes an administrative amendment to allow the facility to use wood residuals from another GP wood products manufacturing facility as supplemental fuel. The facility's permitted annual emissions are increasing by 0.74 tpy acetone and 0.04 tpy ammonia. The facility's permitted annual emissions are decreasing by 47.7 tpy VOC and 36.02 tpy total HAPs.

### 7. COMPLIANCE STATUS:

As of November 4, 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? N

- 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? Y (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? Y 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
	None liste	ed

### 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> )	$\begin{array}{l} \text{PAER (lb/hr)} = \\ 0.11 \times \text{TLV} \end{array}$	Proposed lb/hr	Pass?
Lead	0.05	0.006	0.03	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?
Acetone	1187.12	130.5832	2.81	Y
Ammonia	17.41	1.915	2.97	Ν
Acetaldehyde	45.04	4.9544	7.96	Ν
Acrolein	0.23	0.0253	1.89	Ν
Formaldehyde	0.369	0.041	4.30	Ν
Methanol	262.09	28.8299	16.96	Y
Pentachlorophenol	0.5	0.055	7.20E-06	Y
Phenol	19.25	2.1175	2.73	Ν
Vinyl Acetate	35.21	3.8731	1.13	Y
m-Xylene	0.1	0.011	1.11	Ν
Antimony	0.5	0.055	1.49E-03	Y
Arsenic	0.01	0.0011	2.46E-03	Ν
Beryllium	5.0E-05	5.50E-06	1.09E-05	Ν
Cadmium	0.002	2.20E-04	1.46E-03	Ν
Chromium VI	0.05	5.50E-03	2.24E-03	Y
Chromium (total)	0.01	1.10E-03	2.10E-02	Ν
Cobalt	0.02	2.20E-03	1.09E-03	Y
Hydrogen Fluoride	0.409	0.045	0.06	Ν
Manganese	0.02	2.20E-03	3.70E-01	Ν
Mercury	0.025	2.75E-03	4.23E-04	Y
Nickel	0.1	0.011	2.02E-02	N
Selenium	0.2	0.022	4.40E-04	Y

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.

Pollutant	PAIL $(\mu g/m^3) = 1/100$ of Threshold Limit Value	Modeled Concentration $(\mu g/m^3)$	Pass?
Lead	0.5	4.33E-03	Y
Ammonia	174.13	56.77	Y
Acetaldehyde	450.41	25.77	Y
Acrolein	2.3	0.177	Y
Formaldehyde	15	14.37	Y
Phenol	192.5	0.502	Y
m-Xylene	1.0	0.105	Y
Arsenic	0.1	2.3E-04	Y
Beryllium	5.0E-04	1.0E-04	Y
Cadmium	0.02	1.5E-04	Y
Chromium (total)	0.1	1.12E-03	Y
Hydrogen fluoride	4.09	5.48E-03	Y
Manganese	2.0	0.035	Y
Nickel	1.0	1.52E-03	Y

Emissions from emergency sources are not included in the model.

# 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	Stack Testing	<u>in lb/ODT</u>	2 RTOs & multiclones	85%	<u>Production</u>
OSB	(March 2008 and	PM (fil): 0.40		(PM/PM <sub>10</sub> )	695,009 ODT/yr

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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
5 Dryers	Feb 2013)	PM (con): 0.37 PM <sub>10</sub> : 0.77 NOx: 0.83 CO: 0.49 VOC: 0.20		90% (VOC) 40% (CO)	79.34 ODT/hr <u>Dryer (Wood)</u> 1,752,000 MMBtu/yr 200 MMBtu/
	NCASI Wood Products (Feb 2013)	SO <sub>2</sub> : 1.9e-2 lb/ODT Lead: 7.16e-5 lb/ODT Various HAPs		90% (HAPs)	Dryer (NG) 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			0.196 MMscf/hr <u>TOH (Wood)</u> 700,800 MMBtu/yr
01 Wood Residuals	AP-42, 1.6	Lead: 5.76e-5 lb/MMBtu Various HAPs			80 MMBtu/hr <u>TOH (NG)</u> 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	$\frac{\text{in lb/MMscf}}{PM (fil): 2.28}$ $PM (con): 6.84$ $PM_{10}: 9.12$ $NOx: 120$ $CO: 100.8$ $SO_{2}: 0.72$ $VOC: 6.6$ $Lead 6.0E-04$ Various HAPs	None	N/A	<u>Natural Gas</u> 515 MMscf/yr 5.88e-2 MMscf/hr 20% Safety Factor
02 OSB Press	<u>Uncaptured</u> Stack Testing (2008, 2013, 2018) NCASI Wood	<u>in lb/MSF</u> PM (fil): 2.81E-01 PM (con): 2.76E-01 PM <sub>10</sub> /PM <sub>2.5</sub> : 5.57E-01 CO: 1.80E-01 NOx: 1.30E-01	Multiclones RTO/TCO	75% (PM) 90% (VOC) 75% (CO)	600,000 MSF/yr 90 MSF/hr 103 MMscf/yr 0.0118 MMscf/hr 20% Safety Factor

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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
	Products (Feb 2013)	VOC: 1.15 Various HAPs		95%	
	Captured Stack Testing (2008, 2013, 2018) NCASI Wood Products (Feb 2013)	<u>in lb/MSF</u> PM (fil): 3.30E-02 PM (con): 5.24E-02 PM <sub>10</sub> /PM <sub>2.5</sub> : 8.53E-02 CO: 7.89E-02 NOx: 6.73E-02 VOC: 4.58E-02 Various HAPs		capture efficiency	
02 RTO (Natural Gas)	AP-42, 1.4	<u>in lb/MMscf</u> SO <sub>2</sub> : 0.72 Lead: 6.0E-04 Various HAPs			103 MMscf/yr 0.012 MMscf/hr
02 OSB Press	Manufacturer's Info	Force Field component MSDS		95.21% (VOC)	20 MMSF production
	Stack Testing (2005 & 2018)	PM (fil): 3.90E-03 gr/dscf PM (con): 8.00E-04 gr/dscf		80.00% for PM/PM <sub>10</sub> 99.96% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr 13,623 dscfm
03	Wood Products Protocol 1 (WPP1)	VOC: 7.40E-02 lb/MSF	Bag Filter		
	NCASI Wood Products (Feb 2013)	<u>in lb/MSF</u> Acetone: 1.18E-03 Formaldehyde: 3.61E-04 Methanol: 1.37E-03			20% Safety Factor
	Stack Testing (2005 & 2018)	PM (fil): 1.50E-03 gr/dscf PM (con): 1.10E-03 gr/dscf			
04	Wood Products Protocol 1 (WPP1)	VOC: 7.27E-02 lb/MSF	Receiver	80.00% for PM/PM <sub>10</sub> 99.83% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr 24,084 dscfm
	NCASI Wood Products (Feb 2013)	in lb/MSF Acetone: 1.18E-03 Formaldehyde: 3.61E-04 Methanol: 1.37E-03	Bag Filter		Factor
05	Stack Testing (2005 & 2018)	PM (fil): 2.10E-03 gr/dscf PM (con): 9.00E-04 gr/dscf	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr

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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
	Wood Products Protocol 1 (WPP1)	VOC: 7.40E-02 lb/MSF	Bag Filter	99.83% for PM/PM <sub>10</sub>	33,800 dscfm 20% Safety Factor
	NCASI Wood Products (Feb 2013)	<u>in lb/MSF</u> Acetone: 1.18E-03 Formaldehyde: 3.61E-04 Methanol: 1.37E-03			
	Stack Testing (2005 & 2018)	PM (fil): 3.00E-03 gr/dscf PM (con): 1.90E-03 gr/dscf			
06	Wood Products Protocol 1 (WPP1)	VOC: 7.40E-02 lb/MSF	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr 15,175 dscfm
	NCASI Wood Products (Feb 2013)	<u>in lb/MSF</u> Acetone: 1.18E-03 Formaldehyde: 3.61E-04 Methanol: 1.37E-03	Bag Filter	99.88% for PM/PM <sub>10</sub>	Factor
	Stack Testing (2005)	PM (fil): 8.50E-03 gr/dscf			
07	Wood Products Protocol 1 (WPP1)	VOC: 7.27E-02 lb/MSF	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr 835 dscfm
	NCASI Wood Products (Feb 2013)	<u>in lb/MSF</u> Acetone: 1.18E-03 Formaldehyde: 3.61E-04 Methanol: 1.37E-03	Bag Filter	99.96% for PM/PM <sub>10</sub>	20% Safety Factor
	Stack Testing (2005)	PM (fil): 5.30E-03 gr/dscf			695,009 ODT/yr
08	Wood Products Protocol 1 (WPP1)	VOC: 10.27 lb/hr VOC: 34.4 tpy	Receiver	80.00% for PM/PM <sub>10</sub> 99.46% for	79.4 ODT/hr 600,000 MSF/yr 90 MSF/hr 14,248 dscfm
	NCASI Wood Products (Feb 2013)	PM (con): 4.70E-03 lb/ODT Various HAPs	Bag Filter	PM/PM <sub>10</sub>	20% Safety Factor
09	Stack Testing (2005 & 2018)	PM (fil): 3.20E-03 gr/dscf PM (con): 1.20E-03 gr/dscf	Receiver	80.00% for PM/PM <sub>10</sub>	600,000 MSF/yr 90 MSF/hr

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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
	Wood Products Protocol 1 (WPP1)	VOC: 7.27E-02 lb/MSF		Bag Filter	99.96% for PM/PM <sub>10</sub>	13,623 dscfm 20% Safety Factor	
	NCASI Wood Products (Feb 2013)	<u>in lb/MSF</u> Acetone: 1.18E-03 Formaldehyde: 3.61E-04 Methanol: 1.37E-03					
10	Debarker NCASI July 2014 memo for PM <sub>2.5</sub> and EPA's PM Augmentation Tool	PM: 2.84E-04 lb/ton PM <sub>10</sub> : 1.65E-04 lb/ton (58% of PM) PM <sub>2.5</sub> : 5.40E-05 lb/ton (19% of PM)			None	N/A	1,178,220 ton logs/yr 135 ton logs/hr
	<u>Bark Hog</u> FIRE database, SCC Code 3-07- 008-01	PM: 0.024 lb/ton PM <sub>10</sub> : 0.011 lb/ton			None	N/A	117,822 ton bark/yr 13.5 ton bark/hr
11 Inside Spray Booth	Technical Data Sheets	PM/PM <sub>10</sub> : 2.75E-02 lb/gal VOC: 3.10E-01 lb/gal Ammonia: 8.50E-02 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-01 lb/gal VOC: 3.10E-01 lb/gal Ammonia: 8.50E-02 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 limits	N/A	@365 days/yr 334.3 mile/day 122,006.5 mile/yr

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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
							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 0.18% silt # dry days: 260 days/yr % Time Wind = 13			None	N/A	Outside Bark Storage
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
16	NCASI Wood Products (Feb 2013)	PM (fil): 2.76E-03 lb/ODT PM <sub>10</sub> / PM <sub>2.5</sub> : 5.24E-03 lb/ODT Various HAPs		Nono	N/A	20% Safety Factor 600,000 MSF/yr	
10	Wood Products Protocol 1 (WPP1)	VOC: 0.25 lb/MSF			None	1 1 / / X	90 MSF/hr 695,009 ODT/yr 79 ODT/hr
17	AP-42, 3.4	$\frac{\text{Units in lb/HP-hr}}{\text{PM (fil): 8.40E-04}}$ $\frac{\text{PM}_{10}/\text{PM}_{2.5}: \text{PM (fil) + PM}}{(\text{con})}$ $\frac{\text{SO}_2: 1.46\text{E-05}}{\text{VOC: 6.35\text{E-04}}}$ $\frac{\text{CO: 6.60\text{E-03}}}{\text{NOx: 2.88\text{E-02}}}$ $\frac{\text{PM (con): 9.24\text{E-03 lb/MMBtu}}{\text{PM (con): 9.24\text{E-03 lb/MMBtu}}}$		None	N/A	20% Safety Factor 1,341 HP 9.4 MMBtu/hr 500 hr/yr	
	40 CED 00 102	CO: :	519 g/kW-ł	nr			20% Safety
10	40 CFK 90.103	NOx:	13.4 g/kW-	-hr	Nort	NT / A	Factor
18	AP-42, 3.2-3	<u>Units in lb/MMBtu</u> PM (fil): 1.14E-02 PM (con): 1.19E-02		None	IN/A	0.23 MMBtu/hr 500 hr/yr	

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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 <sub>10</sub> / PM <sub>2.5</sub> : PM (fil) + PM (con) SO <sub>2</sub> : 7.06E-04 VOC: 3.55E-02 Various HAPs			
19	AP-42, 3.3	<u>Units in lb/hp-hr</u> PM/PM <sub>10</sub> / PM <sub>2.5</sub> : 2.64E-03 SO <sub>2</sub> : 2.46E-03 VOC: 3.02E-03 CO: 8.02E-03 NOx: 3.72E-02 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	Units in lb/MMscf PM (fil): 1.9 PM (con): 5.7 PM <sub>10</sub> / PM <sub>2.5</sub> : PM (fil) + PM (con) SO <sub>2</sub> : 0.6 VOC: 5.5 CO: 84 NOx: 100 Various HAPs	None	N/A	2.95 MMBtu/hr NG burner 259 gal/hr 2,268 Mgal/yr
	Testing	VOC: 1.39E-02 lb/gal	None	N/A	259 gal/hr 2,268 Mgal/yr

# 14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
01, 02	PM <sub>10</sub> NO <sub>X</sub> VOC [THC (as carbon)]	5 or 201 7E 25A	Every 5 years, alternate RTOs	63 DDDD
01,02	СО	10	Every 5 years, each RTO	Basis for Calculations

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

## 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
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 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	When venting to atmosphere, fuel used, and amount of fuel used	Only Natural Gas allowed to vent directly to atmosphere	As occurs	Ν

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SN	Recorded Item	Permit Limit	Frequency	Report (Y/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
	VOC emitted & MSDS	18.0 tpy	Monthly	
	or equivalent 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
13	Combined storage area	0.65 acres	Annual	Y
15	If the affected source <u>applies coating to</u> <u>products in the</u> <u>following subcategory:</u> 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 <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)	Monthly and 12 month rolling	N
15	VOC Acetaldehyde	Shall not exceed following Content Limit	Monthly	Ν

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SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	Formaldehyde Methanol Vinyl Acetate [May be MSDS sheets & spreadsheet]	VOC -0.22 % by weight Acetaldehyde - 0.10 % by weight Formaldehyde -0.03 % by weight Methanol - 0.07 % by weight Vinyl Acetate - 0.10 % by weight		
17	Hours of Operation	Nte 500 operating hours per calendar year, based on non-resettable hour meter	As Necessary	N
18	Hours of Operation	Nte 500 operating hours per calendar year, based on non-resettable hour meter	As Necessary	N
19	Hours of Operation	Nte 500 operating hours per calendar year, based on non-resettable hour meter	As Necessary	N

# 17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 and 02	10%	§18.501 and A.C.A.	Monthly Observations
01 and 02	20%	§19.503 and A.C.A.	Daily observation if off- line maintenance activities performed between 6 a.m. and 6 p.m.
03 thru 09	10%	§18.501 and A.C.A.	Monthly Observations
10	20%	§19.503 and A.C.A.	Monthly 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
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
84, 85	SN-14 is being removed from the permit.

### 19. GROUP A INSIGNIFICANT ACTIVITIES:

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

		Emissions (tpy)						
Source Name	Group	PM/	50	VOC	<u> </u>	NO	HA	APs
	See NameGroup $PM/PM_{10}$ $SO_2$ le Heaters (0.07 l)A-10.0040.156ng Tank (250 gal)A-2nop: Diesel TankA-2ilding: Gear OilA-2ilding: Six (6) Gear Oil Tanks (65A-2nent Shop: Used OilA-2eent Shop: Engine gal)A-2nent Shop: Engine sal)A-2nent Shop: Cank (65 gal)A-2nent Shop:A-2nent Shop: Cank (65 gal)A-2nent Shop:A-2nent Shop:nent Shop:nent Shop:nent Shop:nent Shop:nent Shop:	VUC	CO	NOX	Single	Total		
Four (4) Portable Heaters (0.07 MMBtu/hr total)	A-1	0.004	0.156	0.002	0.011	0.040		
Kerosene Fueling Tank (250 gal)	A-2			8.15E-04			1.10E-04	1.10E-04
Maintenance Shop: Diesel Tank (250gal)	A-2			8.15E-04			1.10E-04	1.10E-04
Oil Storage Building: Gear Oil Tank (250 gal)	A-2			8.15E-04			1.10E-04	1.10E-04
Oil Storage Building: Six (6) Hydraulic and Gear Oil Tanks (65 gal each)	A-2			4.89E-03			6.60E-04	6.60E-04
Mobile Equipment Shop: Used Oil Tank (250gal)	A-2			8.15E-04			1.10E-04	1.10E-04
Mobile Equipment Shop: Engine Oil Tank (120 gal)	A-2			8.15E-04			1.10E-04	1.10E-04
Mobile Equipment Shop: Hydraulic Oil Tank (65 gal)	A-2			8.15E-04			1.10E-04	1.10E-04
Mobile Equipment Shop: Transmission Fluid Tank (65 gal)	A-2			8.15E-04			1.10E-04	1.10E-04
Diesel Fueling Tank (3,200 gal)	A-3			2.33E-03			3.15E-04	3.15E-04
Emergency Generator Diesel Tank (2,000 gal)	A-3			8.15E-04			1.10E-04	1.10E-04
Fire Pump Diesel Tank (500 gal)	A-3			8.15E-04			1.10E-04	1.10E-04

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		Emissions (tpy)						
Source Name	Group	PM/	50	VOC	CO	NO	HA	APs
		PM <sub>10</sub>	$50_2$	VUC	CO	NOX	Single	Total
Green End Hydraulic Oil Tank (550 gal)	A-3			8.15E-04			1.10E-04	1.10E-04
Hydraulic Room: Press Pit Used Oil Tank (6,000 gal)	A-3			5.07E-03			6.85E-04	6.85E-04
Thermal Oil Tank (2,000 gal)	A-3			8.15E-04			1.10E-04	1.10E-04
Thermal Oil Tank (400 gal)	A-3			8.15E-04			1.10E-04	1.10E-04
Oil Storage Building: Hydraulic Oil Tank (500 gal)	A-3			8.15E-04			1.10E-04	1.10E-04
Oil Storage Building: Used Oil Tank (280 gal)	A-3			8.15E-04			1.10E-04	1.10E-04
Two (2) Wax Tanks (10,000 gal each)	A-3	No emissions expected						
Coolant Tote (451 gal)	A-3			0.0			0.0	0.0
Maintenance Welding and Cutting	A-7	0.02					0.072	0.072
Gasoline Fueling Tank (500 gal)	A-13			4.92E-03			1.61E-03	0.23
Two (2) MDI Resin Tank (20,000 gal each)	A-13			1.30E-03			1.30E-03	1.30E-03
Sanderdust Truck Loading	A-13	4.28E-03						
Five (5) Flake Dryer Bins	A-13	0.05						
Bin Overfill Area	A-13	0.05						
Thermal Oil Tank (15,000 gal)	A-13			0.01			6.50E-04	1.49E-03
Supplemental Fuel Handling	A-13	0.0047						

# 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-R20	

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-R21 AFIN: 07-00212

\$/ton factor Permit Type	23.93 Modification	Annual Chargeable Emissions (tpy) Permit Fee \$	2144.34 1000
Minor Modification Fee \$ Minimum Modification Fee \$	500 1000		
Renewal with Minor Modification \$ Check if Facility Holds an Active Minor Source or Min Source General Permit	500 or		
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)	0 -74.9		

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
$PM_{10}$		519.3	519.3	0		
PM <sub>2.5</sub>		0	0	0		
$SO_2$		34.7	34.7	0	0	34.7
VOC		1146.6	1098.9	-47.7	-47.7	1098.9
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	34.59	-1.37		<u> </u>
Acrolein		12.34	8.14	-4.2		
Benzene		6.38	0	-6.38		
Formaldehyde		19.33	16.78	-2.55		
Hexane		3.54	0	-3.54		
Methanol		61.65	61.98	0.33		
Pentachlorophenol		0	3.15E-05	0.0000315		
Phenol		14.89	11.59	-3.3		
Propionaldehyde		3.82	0	-3.82		
Styrene		2	0	-2		
Toluene		2.57	0	-2.57		
Vinyl Acetate		4.93	4.93	0		
m-Xylene		0	4.83	4.83		
Antimony		0	6.51E-03	0.00651		
Arsenic		0.05	1.08E-02	-0.0392		
Beryllium		0.02	4.78E-05	-0.0199522		
Cadmium		0.07	6.43E-03	-0.06357		
Chlorine	$\checkmark$	1.17	3.30E-01	-0.84	-0.84	0.33
Chromium VI		0	9.80E-03	0.0098		
Chromium (total)		0	6.05E-02	0.0605		
Cobalt		0	4.75E-03	0.00475		
Hydrochloric Acid	$\checkmark$	28	0.6	-27.4	-27.4	0.6
Hydrogen Fluoride	$\checkmark$	0	0.26	0.26	0.26	0.26
Manganese		1.7	1.59	-0.11		
Mercury		0.03	1.86E-03	-0.02814		
Nickel		0	7.08E-02	0.0708		
Selenium		0	1.93E-03	0.00193		
Total HAPs		203.44	167.42	-36.02		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Acetone	Y	9.47	10.21	0.74	0.74	10.21
Ammonia		4.9	4.94	0.04	0.04	4.94
		0	0	0		
		0	0	0		
		0	0	0		
		0	0	0		
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