

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1803-AOP-R9 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:

Patty Campbell, PE

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Reconstituted Wood Product Manufacturing
NAICS Code: 321219

5. SUBMITTALS:

8/9/2011, 8/30/2011, 10/27/2011, and 11/2/2011

6. REVIEWER'S NOTES:

Georgia-Pacific Wood Products, LLC Fordyce OSB operates a facility located at #1 Georgia-Pacific Road, Calhoun County, Fordyce, AR 71742. This permitting action is necessary to modify the permit as follows:

1. Update the Press (SN-02) Hydraulic System with several improvements: an improved filtering unit for the hydraulic oil, a more sophisticated control system, a replacement PVL pump, "soft-start" components for the eight existing hydraulic pumps and an additional ninth "swing" pump. These multiple changes to the hydraulic system will increase the maximum hourly production rate from 76.8 to 77.2 MSF/hr (3/8" basis). There is no increase in pound/hour (lb/hr) or tons per year (tpy) emissions because of the 20% safety factor, Specific Conditions (SC) #18, #19, #20, #27 and #28;

2. Remove outdated language, i.e., “submit [to] . . . Compliance Section Manager” and replace with “. . . in accordance with Plantwide Condition (PWC) #3”, SC #9, #10, #11, #27 and #28;
3. Clarify that stack test records are to be submitted in their entirety to the Department in accordance with General Provision (GP) #7 and maintained on-site in accordance with GP #6 but keep no less than the latest performance test of the unit for SN-01 and SN-02, SC #9, #10, #11, #27 and #28;
4. Minimum 3-hour block average firebox operating temperature established during the most recent performance tests for SN-01 as follows: RTO A – 1550 °F [March 2008] and RTO B – 1552 °F [March 2008], SC #12.a.ii. Subsequent performance test that demonstrates compliance with permit may change the minimum operating temperature;
5. Minimum 3-hour block average firebox operating temperature established during the most recent performance tests for SN-02 as follows: RTO mode 1498 °F [March 2008] and TCO mode 1250 °F [March 2004], SC #29.a.ii. Subsequent performance test that demonstrates compliance with permit may change the minimum operating temperature;
6. Add recordkeeping of HAPs at SN-11 used must be below 2011 reportable Threshold Limit Values (TLVs) and below de minimis levels, SC #68;
7. Add ammonia content limit in the edge seal materials (SN-11) to a maximum allowable of one percent (1.0%) ammonia by weight, SC #71;
8. Updated *Paved* Roads PM/PM₁₀ emissions (SN-12) based on latest revisions to AP-42 Section 13.2.1 (01/2011), SC #73 and #74; and
9. Increase VOC and formaldehyde emissions in Product Storage Area (SN-14) by adding six new 40,000 acfm exhaust fans, SC #80 and #81.

The total permitted annual emission rate changes associated with this modification include: -108.0 tons per year (tpy) PM, -21.2 tpy PM₁₀, 1.4 tpy VOC, 1.03 tpy formaldehyde, 0.0055 tpy POM and 4.00 tpy ammonia.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

There are no active or pending air enforcement actions at this time.

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? N
Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list?
If yes, explain why this permit modification is not PSD?

9. 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	HAPs	NESHAP Subpart ZZZZ

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ($\mu\text{g}/\text{m}^3$)	Averaging Time	Highest Concentration ($\mu\text{g}/\text{m}^3$)	% of NAAQS
PM ₁₀	136.8**	150	24-Hour	133	88.7
CO	226.0**	10,000	8-Hour	137.12	1.37
		40,000	1-Hour	267.35	0.67
NO _x	143.9**	100	Annual	7.54	7.54

*North Little Rock background values 2008 were used, since there are few PM₁₀ monitors in Arkansas, the monitors from the urban areas (Little Rock) overestimate the background conditions in rural areas. The facility originally requested to use a 3-year average since attainment/nonattainment is determined on that basis. Background value averaging will not be allowed since it is not appropriate, per Thomas Rheume 07/31/2009.

**The above modeling was conducted Permit #1803-AOP-R7, issued 03/24/2010. There are no changes in VOC, CO and NO_x hourly emissions in Permit #1803-AOP-R8. (PC, 4/2011)

Non-Criteria Pollutants:

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) = $0.11 \times \text{TLV}$	Proposed lb/hr	Pass?
Acetaldehyde	45.04*	4.9544	2.71**	Y
Acrolein	0.23	0.0253	1.11*	N
Ammonia	17.41	1.915	1.3***	Y
Benzene	1.60	0.176	0.14*	Y
Cadmium	0.002	0.0002	0.03*	N
Formaldehyde	1.5	0.165	7.15***	N
Hexane	176.24	19.3864	0.96*	Y
Methanol	262.09	28.8299	13.41**	Y
Phenol	19.25	2.1175	2.96*	N
POM	0.20	0.022	0.011* (02)	Y
Propionaldehyde	47.53	5.2283	0.20*	Y
Vinyl Acetate	35.21	3.8731	1.24**	Y
Acetone	1187.12	130.5832	2.20*	Y

* Emissions unchanged as of Permit #1803-AOP-R7, renewal, March 24, 2010.

**Emissions updated as of Permit #1803-AOP-R8, re change to SN-15, April 2011.

***Emissions updated as of Permit #1803-AOP-R9, re changes to SN-11, 12 & 14, August 2011.

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 ($\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass?
Acrolein	2.3	0.486	Y
Cadmium	0.02	2.3E-4	Y
Formaldehyde	15.0**	10.042*	Y
Phenol	192.5	1.38	Y

* Modeled on August 16, 2011 for Permit #1803-AOP-R9 by PC.

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

Other Modeling: None

12. 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	2002 PSD Application (Permit #1803-AOP-R2)	18.81 lb/hr PM/PM ₁₀ 14.66 lb/hr NO _x 31.89 lb/hr VOC	2 RTOs & multiclones	90% (PM/PM ₁₀)	PM ₁₀ control efficiency of multiclones is 33.3%
	AP-42, Table 1.6-2	0.025 lb/MMbtu SO ₂		90% (VOC)	
	AP-42, Table 10.6.1-2	5.3 lb/ODT CO		40% (CO)	PM ₁₀ control efficiency due only to the RTO is 85%
				90% (Acetone)	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	AP-42, Table 10.6.1-3	0.172 lb/ODT Acetaldehyde 0.200 lb/ODT Acetone 0.128 lb/ODT Acrolein 0.0113 lb/ODT Benzene 0.405 lb/ODT CH ₂ O 0.142 lb/ODT Methanol 0.0284 lb/ODT Phenol 0.0172 lb/ODT Propionaldehyde			Total PM ₁₀ control efficiency (operated in series) is 90%
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 ₂ O 1.8 lb/MMscf Hexane			
	AP-42, Table 1.4-4	1.1E-03 lb/MMscf Cadmium			
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 ₂ O 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)	@8,760 hrs/yr
	AP-42, Table 10.6.1-5	0.0014 lb/MSF NO _x 0.0026 lb/MSF CO		90% (VOC)	

SN	Emission Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	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 ₂ O 0.50 lb/MSF Methanol 0.072 lb/MSF Phenol		75% (CO)	Maximum Annual OSB Throughput = 600,000 million SF/yr Maximum Hourly Throughput = 77,200 SF/hr = 77.2 MSF/hr
02 RTO (Natural Gas)	AP-42, Table 1.4-1	100 lb/MMscf NO _x 84 lb/MMscf CO			Safety Factor = 1.2 for OSB press and OSB RTO Press RTO – 12 MMBTU/hr = 0.0118 MMscf/hr
	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 ₂ O 1.8 lb/MMscf Hexane			
	AP-42, Table 1.4-4	1.1E-03 lb/MMscf Cadmium			
03	Air Flow	13,623 dscfm 0.01 grains/dscf			Screen Fines/ Saw Trim Transfer Pneumatics Calculations were provided for both Throughput and Air flow/Grain loading. The maximum emissions were used.
	Throughput	145,208 tpy 33,152 lb/hr 77.2 MSF/hr	Receiver	80.00% for PM/PM ₁₀	
	AP-42, Table 10.6.1-7 (03/2002) Raw Fuel Bin	0.06 lb/MSF VOC 0.0003 lb/MSF CH ₂ O 0.0015 lb/MSF Acetone 0.0015 lb/MSF Methanol	Bag Filter	99.96% for PM/PM ₁₀	
04	Throughput	6,203 lb/hr	Receiver Bag Filter	80.00% for PM/PM ₁₀ 99.83% for PM/PM ₁₀	@8,760 hrs/yr Safety Factor 1.2

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
05	Air flow/ Grain loading	33,800 dscfm 0.01 grain/dscf	Receiver	80.00% for PM/PM ₁₀	
			Bag Filter	99.83% for PM/PM ₁₀	
06	Air flow/ Grain loading	15,175 dscfm 0.01 grain/dscf	Receiver	80.00% 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	Bag Filter	99.88% for PM/PM ₁₀	
07	Throughput	23,315 tpy 5,323 lb/hr 77.2 MSF/hr	Receiver	80.00% 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	Bag Filter	99.96% for PM/PM ₁₀	
08	Air flow/ Grain loading	14,248 dscfm 0.01 grain/dscf	Receiver	80.00% for PM/PM ₁₀	
			Bag Filter	99.46% for PM/PM ₁₀	
09	Throughput	33,152 lb/hr	Receiver	80.00% for PM/PM ₁₀	
			Bag Filter	99.96% for PM/PM ₁₀	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)			Control Equipment	Control Equipment Efficiency	Comments
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	0.176 gal/MSF 13.7 gal/hr			None	54% (solids content) 30% (exhaust) 98% (filter efficiency)	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%
	Outside Spray Booth	0.018 gal/MSF 1.4 gal/hr					
	Throughput	78 MSF/hr					
	Testing	8.5 lb/gal Paint/Ink Density 0.31 lb/gal VOC 0.085 lb/gal HAPs					
12 Roads	AP-42, Section 13.2.1 (01/2011) Paved Roads	PM PM ₁₀	lb/VMT Varies	$\frac{k}{0.0110}$ $\frac{k}{0.0022}$	Sweeping, water truck, speed limits	N/A	@8,760 hrs/yr 192.2 mile/day 70,135 mile/yr No rain
	AP-42, Section 13.2.2 (11/2006) Unpaved Roads	PM PM ₁₀	lb/VMT 10.0 3.07	$\frac{k}{4.9}$			@2,400 hrs/yr 76.0 mile/day 7,600 mile/yr 100 days rain
13	AP-42 Table 11.9-4 AP-42 Table 11.9-1 AP-42 Section 13.2.4	0.38 tons/acre-year 0.72U TSP \leq 30 μ m 0.000046 lb/ton PM/PM ₁₀			None	N/A	Outside Bark Storage

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
14	OSHA Testing indicates 0.21 ppm VOC/HCHO	0.21 ppm VOC 0.21 ppm CH ₂ O Fan Speed 1 @40,000 acfm 6 @48,356 acfm max total fan flow = 330,136 acfm HCO 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 ₂ O 0.07% by wt Methanol 0.11% by wt Vinyl Acetate			
16	Throughput	77.2 MSF/hr	None	N/A	Blender @8,760 hrs/yr Safety Factor = 1.2
	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 ₂ O 0.063 lb/MSF Methanol			
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 SO ₂ 0.00247 lb/hp-hr VOC 0.00668 lb-hp-hr CO 0.031 lb/hp-hr NO _x			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	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 CH ₂ O 0.000168 lb/MMBtu POM			

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

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

14. 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

15. 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

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
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	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	

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	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	On going	
	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	On going	Y
15	<u>If the affected source applies coating to products in the 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 HAP/liter solids (lb HAP/gal solids) is</u> 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]	<u>Shall not exceed following Content Limit</u> 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

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 and 02	10%	§18.501 and A.C.A.	Weekly
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
10	20%	§19.503 and A.C.A.	Weekly
12 (off-site)	5%	A.C.A.	Water sprays, etc
13	20%	§19.503 and A.C.A.	None
17	20%	§19.503 and A.C.A.	Use of diesel fuel only

17. DELETED CONDITIONS:

Former SC	Justification for removal
29 .a. ii.	Remove the 3-hour block average catalytic oxidizer temperature for SN-02 above 800 °F for TCO mode. Outdate info.

18. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	A	Emissions (tpy)						
		PM/ PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							S	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	--	--	--	--

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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
Gasoline Fueling Tank	A-13			0.25				
Emergency Fire Pump	A-13	0.12	0.12	0.14	0.38	1.74		0.003

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1803-AOP-R8

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

Paula Parker, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 08-30-11

Facility Name: Georgia-Pacific Wood Products, LLC
 Fordyce OSB
 Permit Number: 1803-AOP-R9
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\$/ton factor	22.65	Annual Chargeable Emissions (tpy)	2094.7
Permit Type	Modification	Permit Fee \$	1000

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	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	-102.6
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 condensable 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	<input checked="" type="checkbox"/>	723.1	615.1	-108	-108	615.1
PM ₁₀	<input type="checkbox"/>	549.1	527.9	-21.2		
SO ₂	<input checked="" type="checkbox"/>	33.2	33.2	0	0	33.2
VOC	<input checked="" type="checkbox"/>	1008.7	1010.1	1.4	1.4	1010.1
CO	<input type="checkbox"/>	944.7	944.7	0		
NO _x	<input checked="" type="checkbox"/>	423.8	423.8	0	0	423.8
Acetaldehyde	<input type="checkbox"/>	11.68	11.68	0		
Acrolein	<input type="checkbox"/>	4.51	4.51	0		
Benzene	<input type="checkbox"/>	0.43	0.43	0		
Cadmium	<input type="checkbox"/>	0.03	0.03	0		
Formaldehyde	<input type="checkbox"/>	29.43	30.46	1.03		
Hexane	<input type="checkbox"/>	3.76	3.76	0		
Methanol	<input type="checkbox"/>	55.03	55.03	0		
Phenol	<input type="checkbox"/>	10.54	10.54	0		
POM	<input type="checkbox"/>	0.0145	0.02	0.0055		
Propionaldehyde	<input type="checkbox"/>	0.6	0.6	0		
Vinyl Acetate	<input type="checkbox"/>	5.43	5.43	0		
Combined HAPs	<input type="checkbox"/>	4	4	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Acetone	<input checked="" type="checkbox"/>	8.5	8.5	0	0	8.5
Ammonia	<input checked="" type="checkbox"/>	0	4	4	4	4
pc 11/21/11	<input type="checkbox"/>	0	0	0		