STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0688-AOP-R20 AFIN: 30-00015

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Arauco North America, Inc.
1275 Willamette Road
Malvern, Arkansas 72104

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Reconstituted Wood Product Manufacturing
NAICS 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
9/10/2025	Minor Mod	Increased ODT throughput at SN-12

6. REVIEWER'S NOTES:

With this minor modification, the facility is relocating one of the rip saws and shaper saw from the moulding facility (SN-100) to the MDF facility. These two saws will be connected to the sawdust pickup baghouse (SN-12). This modification will not alter the fabric filter or its maximum airflow capacity but will increase the oven-dried ton throughput at SN-12. The facility's permitted annual emissions are increasing by 5.2 tpy VOC, 0.97 tpy acetone, 0.65 tpy formaldehyde, 3.22 tpy methanol, and 1.3 tpy phenol.

7. COMPLIANCE STATUS:

As of September 10, 2025, there are no compliance issues with the facility. ECHO (https://echo.epa.gov/detailed-facility-report?fid=110000597881) shows no air violations identified as of July 11, 2024.

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

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-37 & SN-38	N/A (natural gas-fired sources)	NSPS, Subpart Dc
	There are no specific emission limits or pollutants identified, but the rule generally regulates HAPs	NESHAP, Subpart DDDDD
Plantwide	HAPs	NESHAP, Subpart DDDD
SN-35B	CO PM NMHC + NO_x	NSPS, Subpart IIII

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
N/A				

11. 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 8 CAR pt. 40 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		

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
None of the control devices in the facility are subject to CAM because the emissions that enter the control devices are less than 100 tpy.		

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. 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 DEQ Air Permit Screening Modeling Instructions.

b) 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 × TLV	Proposed lb/hr	Pass?
Acetaldehyde	45.04	4.95	9.03	No
Acetone	1187	130	0.99	Yes
Cadmium	0.01	1.1E-03	0.04	No
Formaldehyde	1.5	0.165	11.36	No
Hexane	176.2	19.3	9.18	Yes
Methanol	262	28.8	12.82	Yes
MIBK	81.9	9.01	8.89	Yes
Phenol	19.2	2.11	10.1	No

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?
Cadmium	0.1	0.050	Yes
Acetaldehyde	450.4	1.59	Yes
Formaldehyde	15	10.65	Yes
Phenol	192.0	23.19	Yes

a) H_2S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H_2S Standards Y
If exempt, explain: the facility does not have H_2S emissions.

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	2017 Stack Test SO_2 based on 2002 Stack Test	<u>Hourly lb/ODT</u> 0.68 PM/PM_{10} 0.063 VOC 1.226 CO 1.143 NOx <u>Annual lb/ODT</u> 0.45 PM/PM_{10} 0.042 VOC 0.817 CO 0.762 NOx 1.08 lb/hr SO_2	RCO	90%	SN-01: 22.71 ODT/hr SN-26: 28 ODT/hr SN-01 + SN-26: 371,372 ODT/yr 4.0 MMBtu/hr each RCO
	AP-42 1.4	<u>lb/MMscf</u> 5.0E-04 lead 1.1E-03 cadmium	None	N/A	
	NCASI TB 770	<u>lb/ODT</u> 0.014 acetone	None	N/A	
26	2017 Stack Test SO_2 based on 2002 Stack Test	<u>Hourly lb/ODT</u> 0.16 PM/PM_{10} 0.10 VOC 0.12 CO 1.37 NOx <u>Annual lb/ODT</u> 0.11 PM/PM_{10} 0.07 VOC 0.08CO 0.91 NOx 0.28 lb/hr SO_2	RCO	90%	
	AP-42 1.4	<u>lb/MMscf</u> 5.0E-4 lead 1.1E-3 cadmium	None	N/A	
	NCASI TB 770	<u>lb/ODT</u> 0.014 acetone	None	N/A	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
04, 09, 22, 22a, 27, & 28	ADEQ Grain Loading Factor + SF	0.001 grain/ dscf PM/PM_{10}	Baghouse	99.2% and higher	38,500 cfm each
	NCASI TB 770	lb/ODT 0.056 VOC 8.9E-3 formaldehyde 6.9E-3 methanol	None	N/A	SN-04: 25 ODT/hr SN-09: 29 ODT/hr SN-22: 25 ODT/hr SN-22a: 25 ODT/hr SN-27:29 ODT/hr SN-28: 29 ODT/hr
12	ADEQ Grain Loading Factor + SF	0.001 grain/ dscf PM/PM_{10}	Baghouse	99.96%	38,500 cfm
	NCASI TB 770	lb/ODT 0.368 VOC 0.075 acetone 0.018 formaldehyde 0.25 methanol 0.1 phenol	None	N/A	SN-12: 9.27 ODT/hr
13	ADEQ Grain Loading Factor + SF	0.001 grain/ dscf PM/PM_{10}	Baghouse	99.96%	93,000 cfm
	NCASI TB 770	lb/Msf 0.0057 VOC 8.5E-4 acetone 4.0E-4 formaldehyde 1.8E-3 methanol 3.5E-3 phenol	None	N/A	SN-13: 79 Msf/hr
14	ADEQ Grain Loading Factor + SF	0.001 grain/ dscf PM/PM_{10}	Baghouse	99.9%	3,000 cfm
16	ADEQ Grain Loading Factor + SF	0.001 grain/dscf PM/PM_{10}	Baghouse	99.99%	38,500 cfm
18	ADEQ Grain Loading Factor	0.05 gr/dscf PM/PM_{10}	Cyclone	--	3,200 cfm
19	AP-42 13.2.4	lb/ton 2.5E-4 PM 1.2E-4 PM_{10}	None	N/A	Material throughput 42.5 tph 302,623 tpy
29	Testing	0.001 grain/ft^3 PM/PM_{10}	Baghouse	99.99%	38,500 cfm

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	NCASI TB 770	<u>lb/ODT</u> 0.13 VOC 4.2E-3 acetone 4.4 E-3 acetaldehyde 3.4E-2 formaldehyde 1.7E-2 methanol	None	N/A	SN-29: 29 ODT/hr
32	ADEQ Grain Loading Factor + SF	0.001 grain/dscf PM/PM_{10}	Baghouse	99.98%	10,500 cfm
34	AP-42 13.2.1	<u>Hourly lb/VMT</u> 0.75 PM 0.15 PM_{10} <u>Annual lb/VMT</u> 0.69 PM 0.14 PM_{10}	Street Sweeper	None applied	sL = 3 g/m^2 W = 23.5 ton P = 105 days N = 365 days 3.66 VMT/hr 8,548 VMT/yr
35B	NSPS IIII	<u>g/HP-hr</u> 0.6 PM/PM_{10} 0.59 VOC 3.7 CO 7.22 NO_x	None	N/A	150 HP 7.7 gal/hr 500 hr/yr 0.137 MMBtu/gal
	AP-42 3.3	0.29 lb/MMBtu SO_2 Various HAPs			
37	AP-42 1.4	<u>lb/MMscf</u> 7.6 PM/PM_{10} 0.6 SO_x 5.5 VOC 84 CO Various HAPs	None	N/A	62 MMBtu/hr
	Vendor Data	<u>lb/MMscf</u> 36 NO_x			
38	AP-42 1.4	<u>lb/MMscf</u> 7.6 PM/PM_{10} 0.6 SO_X 5.5 VOC 84.0 CO 50.0 NO_X Various HAPs	None	N/A	92 MMBtu/hr
100	Nederman Technical Spec	0.001 grain/dscf PM/PM_{10}	Baghouse	99.9%	12,000 cfm

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
101 102 103	Mass Balance	0.1 lb VOC/gal	None	N/A	2,400 gal/day 800 gal/line
104	AP-42 13.2.1	Hourly lb/VMT 0.92 PM 0.18 PM_{10} Annual lb/VMT 0.86 PM 0.17 PM_{10}	None	N/A	sL = 3.0 g/m^2 W = 28.88 ton P = 105 days N = 365 days 0.88 VMT/hr 1,560 VMT/yr
105	AP-42 13.2.2	Hourly lb/VMT 10.5 PM 3.0 PM_{10} Annual lb/VMT 7.49 PM 2.14 PM_{10}	None	N/A	s = 8.4 g/m^2 W = 28.54 ton P = 105 days 2.96 VMT/hr 5,622 VMT/yr

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
01	PM_{10} NO_x CO Opacity	201A or 5, & 202 7E 10 9	No later than February 1, 2013, and once every 5-years thereafter.	Necessary to verify emissions
	VOC (inlet and outlet)*	25A	Once every 5-years thereafter on the same schedule as the PM_{10}, NO_x, CO, and opacity.	Necessary to verify emissions
26	PM_{10} NO_x CO VOC (inlet and outlet)* Opacity	201A or 5, & 202 7E 10 25A 9	No later than February 1, 2013, and once every 5-years thereafter.	Necessary to verify emissions

SN	Pollutants	Test Method	Test Interval	Justification
37	CO	10	Initial test**	Necessary to verify emissions

* Inlet and outlet VOC testing is only required if the facility ever fails a VOC test.
** Vendor guarantee for CO emissions was listed as three times higher than AP-42. Facility agreed to stack test to demonstrate that CO emissions are lower than the vendor guarantee.

17. 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 & 26	Min. avg. Combustion Temperature 671°F (SN-01) & 744°F (SN-26)	CPMS	Combustion Temp: Recorded – 15 min. Averaged – 3 hr (block)	No
01 & 26	Pressure Differential	CPMS	Pressure Differential: Recorded – 1 hr Averaged – 24 hr	No
	Catalytic Activity	Test	Annually	No

18. 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)
01 & 26	Material Throughput	371,372 tons	Monthly	Yes
04, 09, 12, 13, 14, 16, 22, 22a, 27, 28, 29, 32, 100	Opacity observations	5 %	Daily	Yes
	Equipment inspections, maintenances, and repairs	Weekly inspections	Monthly	Yes
18	Hours of Operation	4,000 hr per rolling 12 months	Monthly	Yes
19	Green wood chips received	302,623 tons per rolling 12 months	Monthly	Yes

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
37 & 38	Natural Gas Burned	543.2 $MMft^3/yr$	Monthly	Yes
		790.2 $MMft^3/yr$		
	Notification/reports pursuant to § 63.7555	N/A	As Needed	No
35B	Hours of operation	500 hours per calendar year	Monthly	Yes
	Maintenance plan and records of conducted maintenance (if necessary per 40 C.F.R. § 60.4211(g)(2))	N/A	As Needed	No
101, 102, 103	VOC emissions	10.2 lb/hr 43.8 tpy	Monthly	Yes

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 & 26	10%	Reg.18.501	Weekly Observations
04, 09, 12, 13, 14, 16, 22, 22a, 27, 28, 29, 32, 100	5%	Reg.18.501	Weekly Observations
18	5%	Reg.18.501	Weekly Observations
37 & 38	5%	Reg.18.501	Natural gas only
34, 104, 105	No visible emissions off-site	Dept. Guidance	Dust Suppression
35B	20%	Reg.18.501	Annual observations

20. DELETED CONDITIONS:

Former SC	Justification for removal
N/A	

21. GROUP A INSIGNIFICANT ACTIVITIES:

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

Source Name	Group A Category	Emissions (tpy)						
		PM/ PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
Moulding Dept Line 1 Ovens (2 @ 1.29 MMBtu/hr each)	A-1	0.08	0.01	0.06	0.93	1.11	0.06	0.06
Moulding Dept Line 2 Ovens (2 @ 1.29 MMBtu/hr each)	A-1	0.08	0.01	0.06	0.93	1.11	0.06	0.06
Moulding Dept Line 3 Ovens (2 @ 1.29 MMBtu/hr each)	A-1	0.08	0.01	0.06	0.93	1.11	0.06	0.06
Diesel Storage Tank (300 gal)	A-3			0.01			0.01	0.01
Diesel Storage Tank (1,000 gal)	A-3			0.01			0.01	0.01
Resin Tanks (6 @10,000 gallons each)	A-13			0.04			0.04	0.04
Gasoline Storage Tank (1,000 gal)	A-13			0.29			0.29	0.29
Woodwaste Loadout	A-13	0.37						
Cooling Towers (2 @ 1,500 gpm each)	A-13	0.46						

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
0688-AOP-R19

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Arauco North America Incorporated
Permit Number: 688-AOP-R20
AFIN: 30-00015

$/ton factor	28.14	Annual Chargeable Emissions (tpy)	523.3
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)	6.17
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		116.9	116.9	0	0	116.9
PM_{10}		97.5	97.5	0		
$PM_{2.5}$		0	0	0		
SO_2		8.3	8.3	0	0	8.3
VOC		149.7	154.9	5.2	5.2	154.9
CO		246.7	246.7	0		
NO_X		239	239	0	0	239
Lead	☐	0.000351	0.000351	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Acetone	☑	3.23	4.2	0.97	0.97	4.2
Acetaldehyde	☐	39.51	39.51	0		
Cadmium	☐	0.04	0.04	0		
Formaldehyde	☐	48.94	49.59	0.65		
Hexane	☐	40.15	40.15	0		
Methanol	☐	52.83	56.05	3.22		
MIBK	☐	38.94	38.94	0		
Phenol	☐	42.92	44.22	1.3		
Total Other HAPs	☐	0.03	0.03	0		