

STATEMENT OF BASIS

for the issuance of Draft Air Permit # 1681-AOP-R5

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913

2. APPLICANT:

Anthony Forest Products Company
1236 Urbana Road
Urbana, Arkansas 71768

3. PERMIT WRITER: Charles Hurt

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: All Other Miscellaneous Wood Product Manufacturing
NAICS Code: 321999

5. SUBMITTALS: July 11, 2002 October 28, 2002 August 5, 2003

6. REVIEWER'S NOTES:

Anthony Forest Products Company operates a sawmill and ancillary operations in Urbana, Arkansas. The facility submitted its application for a Title V Renewal. This is the first renewal for the facility. The facility also requests to install a completely enclosed air lock system to route shavings and sawdust from the Planer Mill (SN-07) to an existing fuel storage bin on an as needed basis. Currently, all shavings from SN-07 are transferred to tractor trailers for offsite disposal. PM emissions will not change due to the installation of the air lock system, and the total waste from the Planer Mill will not increase. PM and VOC will increase by 48.2 and 39.7, respectively. PM₁₀ and Heavy Metals will decrease by 23.5 and 1.5 tpy, respectively. Changes in emissions are due to revised methods of calculation and updated emission factors.

7. COMPLIANCE STATUS:

There are currently no enforcement issues or actions against the facility at this time

8. APPLICABLE REGULATIONS:

PSD Applicability

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

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Has this facility undergone PSD review in the past? N Permit#
Is this facility categorized as a major source for PSD? N
\$ 100 tpy and on the list of 28 (100 tpy)? N
\$ 250 tpy all other N

PSD Netting

Was netting performed to avoid PSD review in this permit? N

Source and Pollutant Specific Regulatory Applicability

Source	Pollutant	Regulation [NSPS, NESHAP (Part 61 & Part 63), or PSD only]
12, 13, 16	N/A*	NSPS Subpart Dc

* The facility is subject to 40 CFR Part 60, Subpart Dc since each boiler’s designed input heat capacity exceeds 10 MMBTU/hr. However, each boiler is less than 30 MMBTU/hr. Therefore, no pollutant standard or record keeping is applicable.

9. EMISSION CHANGES:

The following table summarizes plant wide emission changes associated with this permitting action.

Plant Wide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 1681-AOP-R4	Air Permit 1681-AOP-R5	Change
PM	166.5	214.7	48.2
PM ₁₀	160.2	136.7	-23.5
SO ₂	6.6	6.6	0.0
VOC	202.0	241.7	39.7
CO	197.1	197.1	0.00
NO _x	112.3	112.3	0.0
HAP	1.50	32.70	31.20
Heavy Metals*	4.2	2.7	-1.5

* Heavy Metals are included in PM₁₀ total.

10. 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	31.3	50	Annual	49.4	98.8%
		150	24-hour	142.7	95.4%
NO _x	25.6	100	Annual	1.2	1.0%
VOC		0.12	1-hour (ppm)	0.0162	14%
CO		10,000	8-hour	24.6	<1.00%
		40,000	1-hour	58.9	<1.0%

11. 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 deemed 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?
Acrolein	0.2293	0.0252	0.6	N
Benzene	1.597	0.175	0.6	N
Formaldehyde	0.368	0.04048	1.2	N
Methanol	262.085	28.82935	6.3	Yes
Styrene	85.562	9.41182	0.3	Yes
HCl	7.458	0.82038	1.8	No

2nd Tier Screening (PAIL)

ISCST3 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 was deemed by the Department to be one one-hundredth of the Threshold Limit Value, as listed by the ACGIH.

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Pollutant	(PAIL, $\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass?
Acrolein	22.93	1.24	Yes
Benzene	159.7	1.24	Yes
Formaldehyde	36.8	2.47	Yes
HCl	745.8	3.71	Yes

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, Testing, etc)	Emission Factor and units (lbs/ton, lbs/hr, etc)	Control Equipment Type (if any)	Control Equipment Efficiency	Comments (Emission factor controlled/unc controlled, etc)
03, 04	AP-42	0.03 gr/scf	none	N/A	planer mill cyclone #1 and #2
06	AP-42	0.024 lb/ton (debarking) 0.35 lb/ton (sawing)	none	N/A	uncontrolled, non-fugitive PM emissions
07	AP-42	1.0 lb/ton (Vent) 2.0 lb/ton (Load out)	none	N/A	uncontrolled, non-fugitive PM emissions
02, 14, 17	Industry Average NCASI	3.5 lb VOC/MBF 0.205 lb MeOH/MBF 0.016 lb Formaldehyde/MBF	none	N/A	uncontrolled VOC and HAP emissions
12, 13, 16	AP-42	4,350 Btu/lb fuel	cyclones	99%	Heating Value for Fuel (wood waste)
18	AP-42	1 lb PM/ton wood 0.36 lb PM ₁₀ /ton wood	none	N/A	uncontrolled PM emissions

13. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
16	PM ₁₀	201A or 202	Pass- Once every five years Fail- Once every other year	Dept. Guidance
16	CO	10	one time	Dept. Guidance

14. MONITORING OR CEMS

There are no required CEMs or required monitoring devices at this facility.

15. RECORD KEEPING REQUIREMENTS

The following are items (such as throughput, fuel usage, VOC content of coating, etc.) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Recorded Item	Limit (as established in permit)	Frequency*
12, 14, 17	Wet Lumber Throughput	195 MMBF/yr	Monthly
06	Logs Debarked and Sawed	650,000 tons/yr	Monthly
07	Dry Lumber Throughput	195 MMBF/yr	Monthly
12	Steam Produced	489,600 lb steam/day 178.7 MM lb steam/yr	Daily
13	Steam Produced	489,600 lb steam/day 178.7 MM lb steam/yr	Daily
16	Steam Produced	489,600 lb steam/day 178.7 MM lb steam/yr	Daily

* Indicate frequency of recording required for the item (Continuously, hourly, daily, etc.)

** Indicates whether the item needs to be included in reports

16. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
03, 04	20	Regulation 19	Daily observation
12,13,16	20	Regulation 19	Daily observation

17. DELETED CONDITIONS:

No specific conditions were deleted in this permit.

18. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

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

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19. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Phillip Murphy, P.E.
Engineering Supervisor, Air Division