

STATEMENT OF BASIS

for the issuance of Draft Air Permit # 1140-AOP-R1

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Anthony Timberlands, Inc.
930 Cabe Street
Malvern, Arkansas 72104

3. PERMIT WRITER:

Ann Wellinghoff

4. PROCESS DESCRIPTION AND SIC CODE:

SIC Description: Pine Sawmill
SIC Code: 2421

- 5. SUBMITTALS:**
- November 29, 2001
 - January 4, 2002
 - January 9, 2002
 - January 24, 2002
 - January 28, 2002
 - February 19, 2002
 - February 22, 2002
 - February 25, 2002

6. REVIEWER'S NOTES:

Anthony Timberlands, Inc. currently operates a pine sawmill located at 930 Cabe Street in Malvern, Hot Spring County, Arkansas. Arkansas Operating Permit #1140-AOP-R1 is the first modification to this facility's initial Title V air permit. This facility is modifying their permit to add a second debarker. This additional debarker will allow an increase in annual production capacity from 90,000,000 board feet to 120,000,000 board feet. In addition, the boiler emissions (SN-02 and SN-03) were updated to reflect the new AP-42 emission factors.

- 7. COMPLIANCE STATUS:** The following summarizes the current compliance status of the facility including active/pending enforcement actions and recent compliance activities and issues

There are currently no enforcement actions against this facility.

8. APPLICABLE REGULATIONS:

A. Applicability

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

Has this facility underwent PSD review in the past (Y / N) N Permit # _____

Is this facility categorized as a major source for PSD? (Y/N) N
 \$ 100 tpy and on the list of 28 (100 tpy)? (Y/N) N
 \$ 250 tpy all other (Y/N) N

B. PSD Netting

Was netting performed to avoid PSD review in this permit? (Y/N) N

C. Source and Pollutant Specific Regulatory Applicability

Source	Pollutant	Regulation [NSPS, NESHAP (Part 61 & Part 63), or PSD <u>only</u>]
Not Applicable		

9. EMISSION CHANGES:

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

Plantwide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 1140-AOP-R0	Air Permit 1140-AOP-R1	Change
PM/PM ₁₀	37.3	55.0	17.7
SO ₂	0.2	0.2	0

Plantwide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 1140-AOP-R0	Air Permit 1140-AOP-R1	Change
VOC	162.8	216.4	53.6
CO	7.2	17.6	10.4
NO _x	28.8	21.2	-7.6
Methanol	0.05	0.1	0.05
Diethylene Glycol Monomethyl Ether	2.7	3.7	1
Cumene	0.05	0.4	0.35
Xylene	0.05	0.4	0.35

10. MODELING:

A. Criteria Pollutants

Pollutant	Emission Rate (lb/hr)	NAAQS Standard (µg/m³)	Averaging Time	Highest Concentration (µg/m³)	% of NAAQS
Not Applicable - VOC less than 500 tpy and all other criteria pollutants less than 100 tpy.					

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 PAER was deemed by the Department 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?
Methanol	262.0	28.82	0.1	Yes
Diethylene Glycol Monomethyl ether	96.66	10.6326	3.7	Yes
Cumene	245.7	27.027	0.4	Yes
Xylene	434.1	47.751	0.4	Yes

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.

Pollutant	(PAIL, $\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass?
Not Applicable			

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/uncontrolled, etc)
01	Memo Dated 1-7-1998 in Permit Guidance Manual	0.02 lb/ton	Cyclone	80%	Green Chips Storage Factor
02 and 03	AP-42	Natural Gas Combustion Factors	---	---	Uncontrolled factors
09	AP-42	0.35 lb/ton	Cyclone	80%	Old AP-42 Emission Factor for Log Sawing
10	Memo Dated 1-7-1998 in Permit Guidance Manual	0.5 lb/ton	---	---	Kiln Dried Shavings Loading Factor
11, 12, and 16	ADEQ Softwood Factor	3.5 lb/1,000 BF	---	---	---
13	Sieve Testing of Competitor's Lumber Mill	0.6 lb/ton	---	---	Factor accepted since greater than the Kiln Dried Shavings Loading Factor (0.5 lb/ton)
14	Memo Dated 1-7-1998 in Permit Guidance Manual	0.04 lb/ton	---	---	Green Chips Loading Factor

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/uncontrolled, etc)
15	TANKS3	---	---	---	Previous permit. Emissions are based upon TANKS3 program to get the lb/hr.
17	MSDS	---	---	---	Worst case emissions calculated by multiplying maximum pollutant content times the rate of usage (1,334 gal/yr). Hourly emissions based on 2,000 hrs/yr.

13. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
Not Applicable				

14. MONITORING OR CEMS

The following are parameters that must be monitored with CEMs or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Parameter or Pollutant to be Monitored	Method of Monitoring (CEM, Pressure Gauge, etc)	Frequency*	Report (Y/N)**
Not Applicable				

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

** Indicates whether the parameter needs to be included in reports.

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*	Report (Y/N)**
Plantwide	Lumber Production	120,000,000 board feet per 12 months	Monthly	Y
15	Diesel Fuel Usage	150,000 gallons of diesel fuel per 12 months	Monthly	Y
15	Gasoline Usage	50,000 gallons of gasoline per 12 months	Monthly	Y
17	Dip Chemical Usage	1,334 gallons of dip chemicals per 12 months	Monthly	Y
17	Dip Chemical VOC Content (MSDS)	6.72 lb/gal	As Needed	N
17	Dip Chemical HAP Content (MSDS)	Methanol = 0.10 lb/gal Diethylene glycol monomethyl ether = 5.41 lb/gal Cumene = 0.46 lb/gal Xylene = 0.46 lb/gal	As Needed	N

SN	Recorded Item	Limit (as established in permit)	Frequency *	Report (Y/N)**
17	HAP Content Substitutions	See Permit	Monthly	N
01, 09, 10, 13, 14	Records of Visible Emissions in Excess of Permitted Opacity	Opacity limits are varied - see following section.	As Needed	N

* 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)
01, 09	20	Previous Permit Limit	Daily Observations
02-03	5	Previous Permit Limit	Natural Gas Usage Only
10, 13, and 14	20	Previous Permit Limit	Weekly Observations (Equipment is used sparingly during the day or is operated once a week; refer to RTC for Permit #1140-AOP-R0)

17. DELETED CONDITIONS:

The following Specific Conditions were included in the previous permit, but deleted for the current permitting action.

Former SC	Justification for removal
No Specific Conditions were deleted.	

18. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

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

Permit #
1140-AOP-R0

19. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Lyndon Poole, P.E.