

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1140-AOP-R7 AFIN: 30-00084

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

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

3. PERMIT WRITER:

Shawn Hutchings

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Sawmills
NAICS Code: 321113

5. ALL SUBMITTALS:

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
3/16/2017	Minor Modification	Added air curtain incinerator to permit

6. REVIEWER'S NOTES:

Anthony Timberlands, Inc. (ATI) currently operates a pine sawmill located at 930 Cabe Street in Malvern, Arkansas. This permit adds an air curtain destructor, SN-24 and adds a Plantwide limit of 245.4 tpy of CO. The new air curtain destructor is subject to 40 C.F.R. § 60, Subpart CCCC, *Standards of Performance for Commercial and Industrial Solid Waste Incineration Unit*. Permitted emissions increased 7.8 tpy of HAPs, 13.8 tpy of NO_x, 11.8 tpy of CO, 11.3 tpy of VOC, 1.2 tpy of SO₂, 2.2 tpy of particulate, and 0.1 tpy of lead.

Facility is taking a Plantwide CO limit to remain below PSD major thresholds.

7. COMPLIANCE STATUS:

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

Facility has a past CAO for issues with boiler testing and the Boiler MACT. Those issues are unrelated to this modification and the previous permit modification corrected and issues with the permit.

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.

8. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
18 and 19	PM	40 C.F.R. § 64, C.A.M.
02 and 03, 18 and 19	HAPs	40 C.F.R. § 63, Subpart DDDDD
23	HAPs	40 C.F.R. § 63, Subpart ZZZZ
24	Opacity limits only.	40 C.F.R. § 60, Subpart CCCC

9. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

10. AMBIENT AIR EVALUATIONS:

a) Reserved.

The non-criteria pollutants listed below were evaluated. Based on Department procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

b) Non-Criteria Pollutants:

Based on Department procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

11. 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>lb/ton</u> PM = 0.02 PM ₁₀ = 0.02	Cyclone	80%	
02, 03	AP-42 Chapter 1 Section 1.4	<u>lb/MMsf</u> PM/PM ₁₀ = 7.6 SO ₂ = 7.6 VOC = 5.5 CO = 84 NO _x = 100			
09	AP-42	<u>lb/ton</u> PM = 0.35 PM ₁₀ = 0.35	Cyclone	80%	
10	ADEQ memo	<u>lb/ton</u> PM/PM ₁₀ = 0.5 lb/ton			
11,12,16	NCASI for drying kilns	<u>lb/MBF</u> VOC = 3.5 Formaldehyde = 0.016 Methanol = 0.210			
13, 14	ADEQ memo	<u>lb/ton</u> PM = 0.16 PM ₁₀ = 0.2% of PM			
15	EPA's Tank 4.0.9d				
18, 19	AP-42 Section 1.6 And MACT limits	<u>varied</u>	Multiclone		1,000 HP each
20	AP-42 Section 13.2.1	Equation			
21	Painting usages	<u>VOC Content</u> 4.0 lb/gal			
23	AP-42 Chapter 3 Table 3.3-1	<u>lb/MMBTU</u> PM/PM ₁₀ = 0.31 NO _x = 4.41 SO ₂ = 0.29			190 HP

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		CO = 0.95 VOC = 0.36			
24	Testing AP-42 or MACT limits for engine	lb/ton PM/PM ₁₀ = 0.11 NO _x = 1.1 SO ₂ = 0.1 CO = 0.94 VOC = 1.1	None	N/A	

12. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
02, 03	N/A	Energy Assessment	Initial	40 C.F.R. § 63 Subpart DDDDD
18, 19	PM CO HCl	5 10 26	Annually	40 C.F.R. § 63 Subpart DDDDD
02, 03, 18, 19	N/A	Annual Tune-Up	Annually	40 C.F.R. § 63 Subpart DDDDD
24	Opacity	Method 9	Initial and annual	40 C.F.R. § 60 Subpart CCCC

13. 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)
18, 19	CO	Oxygen Analyzer System	Monthly	N
18, 19	Opacity	COMS	Continuously	N

14. 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)
15	Fuel Usage	150,000 gallons diesel and 50,000 gallon gasoline per 12 month	Monthly	Y
18, 19	Wood waste fuel per year	33,950 tons/year	Monthly	Y
21	Logo Painting	0.4 tpy	Monthly	Y
23	Hours of Operation	500 hours per 12 month	Monthly	Y
24	Wood Combusted	20,000 tons	Monthly	Y

15. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 09, 10, 13, 14, 18, 19, 23	20%	Reg.19.503	Daily Observation
02, 03	5%	Reg.18.501	Daily Observation
24	10% 35% startup 20%	NSPS NSPS Reg 19	Daily Observation

16. DELETED CONDITIONS:

Former SC	Justification for removal
No conditions were deleted.	

17. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)							
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs		
							Single	Total	
40 gallon water Pump Diesel	A-3			0.1 lb/yr					

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Tank								
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18. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1140-AOP-R6

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

1	Chipper Discharge	PM	0.2	0.5
		PM ₁₀	0.1	0.1
2	No. 1 Boiler (NG)	PM	0.2	0.8
		PM ₁₀	0.2	0.8
		SO ₂	0.1	0.1
		VOC	0.2	0.6
		CO	2	8.8
		NO _x	2.4	10.6
		Lead	0.01	0.01
3	No. 2 Boiler (NG)	PM	0.2	0.8
		PM ₁₀	0.2	0.8
		SO ₂	0.1	0.1
		VOC	0.2	0.6
		CO	2	8.8
		NO _x	2.4	10.6
		Lead	0.01	0.01
9	Planer Mill Cyclone	PM	1.5	2.1
		PM ₁₀	1.5	2.1
10	Planer Mill Dryings	PM	10.6	14.6
		PM ₁₀	0.1	0.1
11,12,16	Kiln #1, Drying Kiln #2, Bark and Mulch/Sawdust	VOC	136.5	210
		Methanol	8.19	12.6
		Other HAPs	0.63	0.96
13	Chip Bin Loadout	PM	3.7	8.6
		PM ₁₀	0.1	0.1
14	Fuel (Two Compartments)	PM	1.8	4.1
		PM ₁₀	0.1	0.1
15		VOC	27.8	0.8
		Other HAPs	17.4	0.45
		PM	9.4	41.1

PM
PM ₁₀
PM _{2.5}
SO ₂
VOC
CO
NO _x
Lead
Hydrogen Chloride
Mercury
Methanol
Other HAPs

18	Wood-Fired Boiler	PM ₁₀	10	43.5
		SO ₂	0.8	3.7
		VOC	0.6	2.5
		CO	26	113.7
		NO _x	7.4	32.2
		Lead	0.002	0.008
		Hydrogen Chloride	0.8	3.3
		Mercury	0.0002	0.0009
		Other HAPs	1.4	6.2
19	Wood-Fired Boiler	PM	9.4	41.1
		PM ₁₀	10	43.5
		SO ₂	0.8	3.7
		VOC	0.6	2.5
		CO	26	113.7
		NO _x	7.4	32.2
		Lead	0.002	0.008
		Hydrogen Chloride	0.8	3.3
		Mercury	0.0002	0.0009
20	Roadway Emissions	PM	9.8	12.4
		PM ₁₀	1.9	2.5
21	Logo Paint Operations	VOC	5	0.4
23	190 HP Diesel Emergency Generator	PM	0.5	0.2
		PM ₁₀	0.5	0.2
		SO ₂	0.4	0.1
		VOC	0.5	0.2
		CO	1.3	0.4
		NO _x	5.9	1.5
		Other HAPs	0.1	0.1
		PM	2.6	2.2
		PM ₁₀	2.6	2.2
		SO ₂	2.4	1.2

24	Air Curtain Destructor	VOC	23.7	11.3
		CO	20.8	11.8
		NO _x	26.05	13.8
		Lead	0.01	0.01
		HCl	3.8	4
		Other HAPs	7.5	7.8

49.9 128.5
27.3 96
0 0
4.6 8.9
195.1 228.9
78.1 257.2
51.55 100.9
0.034 0.046

1.6 6.6

0.0004 0.0018
8.19 12.6

28.53 22.11

0.023	0.049
0.023	0.049
0.025	0.052
0.025	0.052
0.017	0.035
0.017	0.035
0.017	0.036
0.108	0.229
0.3	0.7

0.555 1.237