

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1140-AOP-R5 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 Caba Street
Malvern, Arkansas 72104

3. PERMIT WRITER:

Jude Jean-Francois

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Sawmills
NAICS Code: 321113

5. 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
5/20/2015	Renewal	Removing SN-22, Portable Diesel Fired Water Pump, and adding a 190 HP diesel emergency generator, SN-23.

6. REVIEWER'S NOTES:

This permit action is necessary to renew the facility's Title V air permit. The facility requested to remove SN-22, Portable Diesel Fired Water Pump, and add a 190 HP diesel emergency generator, SN-23. SN-18 and SN-19 are subject to NESHAP 40 C.F.R. § 63 Subpart DDDDD and applicable requirement will be added to the permit.

The emission changes include +0.1 tpy PM/ PM₁₀, +0.1 tpy VOC, +0.2 tpy CO, +0.9 tpy NO_x.

7. COMPLIANCE STATUS:

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

The facility was last inspected on March 17, 2015 and was found to be out of compliance. A 190 horsepower diesel generator is in service in the boiler room. The generator has been on site and in operation for approximately nine years. The use of the generator was not addressed in the current permit.

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)
18 and 19	PM	40 C.F.R. § 64, C.A.M.
18 and 19	HAPs	40 C.F.R. § 63, Subpart DDDDD
23	HAPs	40 C.F.R. § 63, Subpart ZZZZ

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. AMBIENT AIR EVALUATIONS:

a) Reserved.

b) Non-Criteria Pollutants:

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.

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/m³), 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	0.23	0.02	2.68E-01	N
Arsenic	0.01	0.0011	1.48E-03	N
Beryllium	0.00005	0.0000055	7.41E-05	N
Manganese	0.1	0.011	1.07E-01	N
Silver	0.1	0.011	1.14E-01	N

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 (µg/m ³) = 1/100 of Threshold Limit Value	Modeled Concentration (µg/m ³)	Pass?
Acrolein	2	0.15544	Y
Arsenic	0.01	0.00084	Y
Beryllium	0.0005	0.00004	Y
Manganese	1	0.0622	Y
Silver	1	0.06606	Y

c) H₂S 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 H₂S Standards Yes
 If exempt, explain: No H₂S emitted

12. 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	NCASIS 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	<u>lb/MMBTU</u> PM/PM ₁₀ = 0.35 NO _x = 0.32 SO ₂ = 0.025 CO = 0.60 VOC = 0.017	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 CO = 0.95 VOC = 0.36			190 HP

13. 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

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

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)
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

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16. OPACITY:

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

17. DELETED CONDITIONS:

Former SC	Justification for removal
34	COMs Requirement

18. 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 Tank	A-3			0.1 lb/yr				

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1140-AOP-R4

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 08-25-14

Facility Name: Anthony Timberlands, Inc.
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\$/ton factor	23.89	Annual Chargeable Emissions (tpy)	464.7
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

If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$ 0

Total Permit Fee Chargeable Emissions (tpy) 1.1

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		146.6	146.7	0.1	0.1	146.7
PM ₁₀		100.5	100.6	0.1		
SO ₂		7.7	7.7	0	0	7.7
VOC		217.5	217.6	0.1	0.1	217.6
CO		193.6	193.8	0.2		
NO _x		86.2	87.1	0.9	0.9	87.1
Hydrogen Chloride	<input checked="" type="checkbox"/>	5.6	5.6	0	0	5.6
Total HAPs	<input type="checkbox"/>		31.97	31.97		