

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 2227-AR-3 AFIN: 69-00298

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Lignetics of AR and MO, LLC
4004 Blue Collar Lane
Mountain View, Arkansas 72560

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Sawmills
NAICS Code: 321113

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
4/1/2025	Deminimis	Connecting cyclone 2 and cyclone 3
4/30/2025	Deminimis/Modification	New baghouse for SN-03 & SN-04

6. REVIEWER'S NOTES:

This permit modification includes two de minimis changes: adding ductwork to connect cyclone 3 to cyclone 2 and installation of a new baghouse to control emissions from the Hammermill (SN-03) and Pellet Cooler (SN-04). Additionally, this modification also adds all missing pre-existing sources to the permit and separates the Chips & Chunks Operation from the Pellet Mill. The facility's permitted annual emissions are increasing by 40.4 tpy PM, 20.4 tpy PM₁₀, 0.2 tpy SO₂, 12.4 tpy NO_x. The facility's permitted annual emissions are decreasing by 1.4 tpy VOC, 3.4 tpy CO, and 0.63 tpy total HAPs.

Permit #: 2227-AR-3

AFIN: 69-00298

Page 2 of 7

7. COMPLIANCE STATUS:

As of April 1, 2025, there are no compliance issues with the facility. ECHO (<https://echo.epa.gov/detailed-facility-report?fid=110044302288>) shows no air violation identified as of October 24, 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)
None identified.		

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
None				

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 Rule 18 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
N/A		

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:

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

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

Y

If exempt, explain: the facility does not have H₂S emissions.

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
Chips & Chunks Facility					
02	Wood Drying NCASI and ADEQ Memo (08/22/2003)	<u>in lb/MBF</u> VOC: 3.5 Methanol: 0.205 Formaldehyde: 0.016 Acrolein: 0.006 Acetaldehyde: 0.039	None	N/A	0.84 MBF/hr 5895 MBF/yr
02A	AP-42, 1.4-2 Natural Gas Combustion	<u>in lb/MMscf</u> PM: 7.6 PM ₁₀ : 7.6 SO ₂ : 0.6 VOC: 5.5 CO: 84 NOx: 100 HAPs: 8.54E-05 lb/MMBtu	None	N/A	20 MMBtu/hr 7000 hr/yr
08 10 14 19	AP-42, 9.9.1 Animal Feed Mills, Cyclone-Controlled Hammermill	PM: 0.067 lb/ton PM ₁₀ : 0.034 lb/ton	None	N/A	8 tph 7000 hr/yr
11 12 15	ADEQ Memo (08/22/2003)	PM: 0.0044 lb/ton PM ₁₀ : 0.00034 lb/ton	None	N/A	8 tph 7000 hr/yr
13 16 17	EPA Region 10 Memo on Sawing	PM: 0.35 lb/ton PM ₁₀ : 0.175 lb/ton	None	N/A	8 tph 7000 hr/yr
18	AP-42, 3.3-1 Diesel Fuel Industrial Engines	<u>in lb/hp-hr</u> PM: 0.0022 PM ₁₀ : 0.0022 SO ₂ : 0.000011 VOC: 0.0025 CO: 0.00668 NOx: 0.031 HAPs: 2.65E-05	None	N/A	46 hp 7000 hr/yr
32	AP-42, 13.2.2 Unpaved Roads	W: 32.5 ton 96.8 days of rain 8.4% silt content	None	N/A	0.39 VMT/hr 2746 VMT/yr
33	AP-42, 10.4.1 Other Waste Cyclones	PM: 3.105 lb/hr PM ₁₀ : 1.139 lb/hr	None	N/A	7000 hr/yr
07	AP-42, 1.4-2 Natural Gas Combustion	<u>in lb/MMscf</u> PM: 7.6 PM ₁₀ : 7.6 SO ₂ : 0.6	None	N/A	10 MMBtu/hr 7000 hr/yr

SN	Emission Factor Source (AP-42, testing)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		CO: 84 NOx: 100 HAPs: 8.54E-05 lb/MMBtu			
	Iowa Dept of Natural Resources Stack Test (12/27/23)	VOC: 1.44 lb/hr	None	N/A	8760 hr/yr
35	<u>Kiln</u> NCASI and ADEQ Memo (02/21/1995)	<u>in lb/MBF</u> VOC: 1.0 Methanol: 0.205 Formaldehyde: 0.016 Acrolein: 0.006 Acetaldehyde: 0.039	None	N/A	0.66 MBF/hr 5782 MBF/yr
Pellet Mill					
01	EPA Region 10 Memo on Wet Material Drop	PM: 0.00075 lb/ton PM ₁₀ : 0.00035 lb/ton	None	N/A	4 tph 35,040 tpy
02B	AP-42, 1.6-1, 1.6-2, 1.6-3 Wood Combustion	<u>in lb/MMBtu</u> PM: 0.4 PM ₁₀ : 0.36 SO ₂ : 0.025 VOC: 0.017 CO: 0.49 NOx: 0.6 HAPs: 1.55E-02	None	N/A	12 MMBtu/hr 8760 hr/yr
03	AP-42, 9.9.1 Animal Feed Mills, Cyclone-Controlled Hammermill	PM: 0.067 lb/ton PM ₁₀ : 0.034 lb/ton	2 Cyclones Baghouse	99.8% PM 99.6% PM ₁₀	6 tph 52,560 tpy
04	AP-42, 9.9.1 Animal Feed Mills, Cyclone-Controlled Pellet Cooler	PM: 0.419 lb/ton PM ₁₀ : 0.239 lb/ton	2 Cyclones Baghouse	99.8% PM 99.6% PM ₁₀	6 tph 52,560 tpy
09	<u>Wood Drying</u> NCASI and ADEQ Memo (08/22/2003)	<u>in lb/MBF</u> VOC: 3.5 Methanol: 0.205 Formaldehyde: 0.016 Acrolein: 0.006 Acetaldehyde: 0.039	None	N/A	0.87 MBF/hr 7579 MBF/yr
21 23 26 28 29	EPA Region 10 Memo on Dry Material Drop	PM: 0.0015 lb/ton PM ₁₀ : 0.0007 lb/ton	None	N/A	6 ODT/hr 52,560 ODT/yr per source

SN	Emission Factor Source (AP-42, testing)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
30	ADEQ Memo (08/22/2003)	PM: 0.0044 lb/ton PM ₁₀ : 0.00034 lb/ton	Cyclone	80% PM 60% PM ₁₀	6 tph 52,560 tpy
31	EPA Region 10 Memo on Wind Erosion	PM: 0.38 ton/acre-yr PM ₁₀ : 0.19 ton/acre-yr	None	N/A	0.27 acre
32	AP-42, 13.2.2 Unpaved Roads	W: 32.5 ton 96.8 days of rain 8.4% silt content	None	N/A	0.35 VMT/hr 2185 VMT/yr
34	AP-42, 10.4.1 Other Waste Cyclones	PM: 3.105 lb/hr PM ₁₀ : 1.139 lb/hr	None	N/A	8760 hr/yr
05	ADEQ memo (08/22/2003) from CHurt to TRheume	<u>Lb/ton wood waste processed</u> Storage PM: 0.0011 Loading PM: 0.0022 Storage PM ₁₀ : 0.00009 Loading PM ₁₀ : 0.00018	None	N/A	Pellet Packaging, Storage and Loading

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
SN-02&02A	VOC	25A	Initial	Emission verification
SN-07	VOC	25A	Initial	Emission verification

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)
N/A				

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)
Facility	Tons of raw green hardwood Sawdust	72,000 tons per rolling twelve month period	Monthly	No
Chips & Chunks Facility	Hours of Operation	7000 hours per rolling twelve month period	Monthly	No

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 03, 04, 08, 10, 11, 12, 13, 14, 15, 16, 17, 19, 21, 23, 26, 28, 29, 30, 33, 34	20%	Rule 19.503	Inspector Observation
02A, 02B, 05, 07, 18	5%	Rule 18.501	Inspector Observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
8, 9	SN-02B is no longer used as a backup for SN-02A.

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
None identified by the facility.								

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 #
2227-AR-2

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Facility Name: Fiber Energy Products
AR LLC
Permit Number: 2227-AR-3
AFIN: 69-00298

			Old Permit	New Permit
\$/ton factor	28.14	Permit Predominant Air Contaminant	65.3	106
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	40.7	
Minimum Initial Fee \$	500			
		Permit Fee \$	1145.298	
Check if Administrative Amendment <input type="checkbox"/>		Annual Chargeable Emissions (tpy)	106	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	65.3	106	40.7
PM ₁₀	34.6	55.3	20.7
PM _{2.5}	0	0	0
SO ₂	1.5	1.7	0.2
VOC	36	25.8	-10.2
CO	39	38.5	-0.5
NO _x	34.6	50.4	15.8
Total HAPs	4.05	2.65	-1.4