

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0684-AR-4 AFIN: 35-00187

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Fiber Resources, Inc.
1609 Celia Road
Pine Bluff, Arkansas 71611

3. PERMIT WRITER:

Ambrosia Brown

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Wood Chips Made in Sawmills
NAICS Code: 321113

5. SUBMITTALS:

9/29/2009, 10/01/2009

6. REVIEWER'S NOTES:

Fiber Resources, Inc., located at 1609 Celia Road, Pine Bluff, AR 71611, is a wood and paper recycling facility. The addition to the facility will allow the processing of wood chips to produce dry fiber. This process includes eight new sources consisting of conveyors, shredders, dryers, bins, and a Webb Burner. The resulting increases of emissions are 35.9 tpy PM, 25.9 tpy PM₁₀, 1.2 tpy SO₂, 1.0 tpy VOC, 28.8 tpy CO, 23.6 tpy NO_x, 0.22 tpy Formaldehyde, and 0.2 tpy Acrolein.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.
There are currently no enforcement actions or other compliance issues

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 not PSD?

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
The facility is not subject to any NSPS, NESHAP, or PSD regulation		

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Examination of the source type, location, plot plan, land use, emission parameters, and other available information indicate that modeling is not warranted at this time.

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 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	0.229	0.0252	0.106	N
Formaldehyde	1.5	0.165	0.116	Y

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 ($\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass?
Acrolein	2.29	1.439	Y

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
13	WebFIRE	0.20 lb/ton PM 0.011 lb/ton PM ₁₀	None	N/A	
14	WebFIRE	0.35 lb/ton PM 0.20 lb/ton PM ₁₀	None	N/A	
15	WebFIRE	0.35 lb/ton PM 0.20 lb/ton PM ₁₀	None	N/A	
16	WebFIRE	1.00 lb/ton PM 0.36 lb/ton PM ₁₀	None	N/A	
17	WebFIRE SCC:30700804 And 15,000 CFM Rating	2.25 lb/SCFM-Year PM 0.90 lb/SCFM-Year PM ₁₀	None	N/A	
18	ADEQ 08-22-03 Memo	0.0004 lb/ton PM 0.00004 lb/ton PM ₁₀	None	N/A	
19	ADEQ 08-22-03 Memo	0.0008 lb/ton PM 0.00008 lb/ton PM ₁₀	None	N/A	
20	ADEQ 08-22-03 Memo	0.0022 lb/ton PM 0.00017 lb/ton PM ₁₀	None	N/A	
21	ADEQ 08-22-03 Memo	0.0044 lb/ton PM 0.00034 lb/ton PM ₁₀	None	N/A	
22	ADEQ 08-22-03 Memo	0.0008 lb/ton PM 0.00008 lb/ton PM ₁₀	None	N/A	
23	WebFIRE	0.35 lb/ton PM 0.20 lb/ton PM ₁₀	None	N/A	
24	WebFIRE	2.0 lb/hour PM 0.8 lb/hour PM ₁₀	None	N/A	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
25	ADEQ 08-22-03 Memo	0.0022 lb/ton PM 0.00018 lb/ton PM ₁₀	None	N/A	
26	ADEQ 08-22-03 Memo	0.0022 lb/ton PM 0.00018 lb/ton PM ₁₀	None	N/A	
27	ADEQ 08-22-03 Memo	0.0022 lb/ton PM 0.00018 lb/ton PM ₁₀	None	N/A	
28	WebFIRE	1.0 lb/ton PM 0.36 lb/ton PM ₁₀	None	N/A	
29	AP-42 Emission Factors 1.6.1, 1.6.2, and 1.6.3	0.4 lb/MMBTU PM 0.36 lb/MMBTU PM ₁₀ 0.49 lb/MMBTU NO _x 0.025 lb/MMBTU SO ₂ 0.6 lb/MMBTU CO 0.017 lb/MMBTU VOC 0.004 lb/MMBTU Acrolein 0.0044 lb/MMBTU Formaldehyde	None	N/A	24MMBTU

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
None				

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)
None				

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)
13-29	Logs processed	100,000 tpy	monthly	N
22-29	Hours of Operation	4,000 hours/yr	Monthly	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 04, 05, 10, 19, 21, 22, 23, 27, 29	20%	§19.503 and A.C.A	Inspection
02, 03, 06, 07, 08, 09, 11, 12, 13, 14, 15, 16, 17, 18, 20, 24, 25, 26, 28	5%	§18.501 and A.C.A.	Inspection

17. DELETED CONDITIONS:

Former SC	Justification for removal
	None

18. GROUP A INSIGNIFICANT ACTIVITIES

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
No insignificant activities changes in Modification								

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

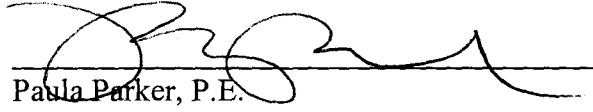
List all active permits voided/superseded/subsumed by the issuance of this permit.

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20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.



Paula Parker, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 07-27-09

Facility Name: Fiber Resources, Inc
 Permit Number: 0684-AR-4
 AFIN: 35-00187

			Old Permit		New Permit
\$/ton factor	22.07	Permit Predominant Air Contaminant	116.9		152.8
Minimum Fee \$	400	Net Chargeable Emission Increase	35.9		
Minimum Initial Fee \$	500	Permit Modification Fee \$	792.313		
		Initial Permit Fee \$	0		
Check if Administrative Amendment	<input type="checkbox"/>	Annual Chargeable Emissions (tpy)	152.8		

Pollutant (tpy)	Old Permit	New Permit	Change
PM	116.9	152.8	35.9
PM ₁₀	72.5	98.4	25.9
SO ₂	9.6	10.8	1.2
VOC	2.9	3.9	1
CO	29.8	58.6	28.8
NO _x	67.7	91.3	23.6
Methanol	0.06	0.06	0
Formaldehyde	0.01	0.23	0.22
Acrolein	0.01	0.21	0.2
Acetaldehyde	0.02	0.02	0