

ADEQ MINOR SOURCE AIR PERMIT

Permit #: 760-AR-4

IS ISSUED TO:

Columbia Forest Products
202 Poinsett Avenue
Trumann, AR 72472
Poinsett County
AFIN: 56-00074

THIS PERMIT IS Columbia Forest Products's AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 *ET SEQ.*) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Michael Bonds
Chief, Air Division

Date

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Section I: FACILITY INFORMATION

PERMITTEE: Columbia Forest Products

AFIN: 56-00074

PERMIT NUMBER: 760-AR-4

FACILITY ADDRESS: 202 Poinsett Avenue
Trumann, AR 72472

COUNTY: Poinsett

CONTACT POSITION: Mike Askea

TELEPHONE NUMBER: (870) 483-6408

REVIEWING ENGINEER: Melisha Griffin

UTM North-South (Y): Zone 15 3950.460

UTM East-West (X): Zone 15 725.110



Section II: INTRODUCTION

Summary

Columbia Forest Products, Inc. operates a veneer laminating facility in Trumann, Arkansas. The facility purchases high quality, dried veneer sheets and various core materials from outside sources, consisting of plywood, particle board, veneer core, and medium density fiberboard. The veneer sheet and core material are delivered to the mill by truck.

This modification to Permit #760-AR-3 allows the facility to move two pieces of woodworking equipment (a counter front sander and a bead grooving machine) from another facility to the Truman facility. Wood residuals from the proposed woodworking equipment will be pneumatically transported into the existing dust collection system and controlled by Baghouse #3 (SN-05). The wood residuals will continue through Cyclone 2 to the fuel silo or the truck loadout (SN-07).

Process Description

Line 1

Veneer sheets and core stock are passed through a lay-up line. A urea formaldehyde resin is spread on the core stock and hardwood veneer is applied to the face and back of each panel. The three pieces are then consolidated into a single panel in a steam heated, 24 opening hydraulic press (SN-03).

The panels are trimmed to size by the Jenkins saw system. Trim wood waste and sawdust from the saw line are controlled by Baghouse 3.

Voids in the panel are hand filled with putty. After the putty has been applied, the panels are sanded by the back sander and face sander. Particulate emissions from the back sander are controlled by Baghouse 2. Particulate emissions from the face sander are controlled by Baghouse 1. The sanded panels are then inspected and packaged for shipment.

Line 2

The flexible manufacturing hardwood plywood line (Line 2) can manufacture plywood in the size range from 3 X 5 foot to 5 X 10 foot plywood panels, but primarily produces 4 X 8 foot, three-ply plywood panels. A urea formaldehyde resin is spread on the core stock and hardwood veneer is applied to the face and back of each panel. A paper uncoiling system can feed and cut a length of paper to replace the back hardwood veneer, if the customer chooses.

Panels are pressed in one of three 5 X 10 foot, five-opening hot presses (SN-06). The presses are heated by hot thermal oil. There is an automatic loading and unloading system to the presses, which is on sliding tracks. The three presses have staggered loading, pressing, and unloading times to maximize the capacity of the line. The panels are trimmed to size and, like in Line 1, some oak faced panels are conditioned to prevent staining. Any voids in the face or

back are hand-filled with putty. The panels are then sanded, inspected and packaged for shipment. Particulate emissions from sawing and sanding operations are controlled by Baghouse 3.

Two ancillary saws are used to trim core stock and veneer. The manual utility (cut back) saw is used to trim core and veneer down to sizes that are not in stock. Particulate emissions are controlled by a dedicated dust collector that is housed within the building. A band saw is used to trim thin core that is delivered oversize compared to the veneer. If the oversize core is not cut down, the resin spread on the core overhang will adhere to the presses. The band saw is not connected to ventilation and produces minimal amounts of wood residuals within the building.

Additional finishing equipment, used only for special orders, consists of the counter front sander and the bead-grooving machine. The counter front sander smooths the face of special order plywood boards that have the veneer grain running across the short side of the board. Sanderdust is captured by a dedicated dust collector that is housed within the building. The bead-grooving machine applies a decorative bead pattern on the finished plywood. Wood residuals from the bead grooving operation are transported through Cyclone 1 to either the fuel silo or the truck loadout. Particulate emissions from Cyclone 1 are controlled by Baghouse 3.

After collection in Baghouse 1 (SN-01) (Line 1 face sander), Baghouse 2 (SN-04) (Line 1 back sander), and Baghouse 3 (SN-05) (Line 1 saw system, Line 2 saw system, Line 2 front sander, Line 2 back sander), all of the wood waste is pneumatically transported through Cyclone 2 to the fuel silo, where it is stored for use as fuel in the wood waste boiler (SN-02). The wood waste boiler produces steam for the press and for plant heating. The waste conveyed from the baghouses to Cyclone 2 travels a closed-loop duct system, with no emissions point. If the fuel silo is full, wood residuals can be diverted to the truck loadout (SN-07), to remove wood waste offsite.




Regulations

The facility is subject to regulations under the *Arkansas Pollution Control Code* (Regulation 18) and the *Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19).

The following table is a summary of the facility's total emissions.

Table 1 - Total Allowable Emissions



Total Allowable Emissions		
Pollutant	Emissions Rates	
	lb/hr	tpy
PM	22.2	87.3
PM ₁₀	21.9	85.8
SO ₂	2.2	9.5
VOC	5.6	24.2
CO	15.8	69.2
NO _x	8.2	32.8
Formaldehyde	1.31	5.66
Methanol	2.03	8.89
Chlorine	0.02	0.05
Arsenic	<0.01	<0.01

Section III: PERMIT HISTORY

Permit #760-A was issued June 25, 1985 to Whittle Plywood Corporation as an initial permit for the facility. This permit allowed the facility to install a 9.56 mmbtu boiler and a baghouse to control sander dust.

Permit #760-AR-1 was issued February 21, 1995 and included confirmation that the ownership had changed from the Whittle Plywood Corporation. Permitted emissions were 20.8 tpy PM/PM₁₀, 1.0 tpy SO₂, 5.1 tpy VOC, 3.5 tpy NO_x, and 0.1 tpy Formaldehyde.

Permit #760-AR-2 was issued December 8, 1996 to incorporate the latest source data on the boiler into the emissions section of the permit and to address a production increase potential from 2.2 million panels per year to 4.2 million panels per year. Permitted emissions were 17.5 tpy PM/PM₁₀, 9.5 tpy SO₂, 22.8 tpy VOC, 6.6 tpy NO_x, and 1.4 tpy Formaldehyde.

Permit #760-AR-3 was issued on November 16, 2000 to include the installation of a new plywood line and the increases in emissions from the wood-fired boiler based on testing results.

Section IV: EMISSION UNIT INFORMATION

Specific Conditions

1. The permittee will not exceed the emission rates set forth in the following table. [§19.501 *et seq.* of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective February 15, 1999 (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 2 - Criteria Pollutants

SN	Description	Pollutant	lb/hr	Tpy
01	Pneumatic Conveying System to Baghouse #1	PM ₁₀	0.2	13.3
04	Pneumatic Conveying System to Baghouse #2	PM ₁₀	0.2	
05	Pneumatic Conveying System to Baghouse #3	PM ₁₀	4.8	
02	Wood-Fired Boiler	PM ₁₀	16.6	72.4
		SO ₂	2.2	9.5
		VOC	0.7	2.8
		CO	15.8	69.2
		NO _x	8.2	32.8
03	Existing Line Press Vents - Line 1	VOC	2.4	10.5
06	Flexible Manufacturing Line Press Vents - Line 2	VOC	2.5	10.9
07	Truck Loadout	PM ₁₀	0.1	0.1

- The permittee will not exceed the emission rates set forth in the following table. [§18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 3 - Non-Criteria Pollutants

SN	Description	Pollutant	lb/hr	tpy
01	Pneumatic Conveying System to Baghouse #1	PM	0.2	13.3
04	Pneumatic Conveying System to Baghouse #2	PM	0.2	
05	Pneumatic Conveying System to Baghouse #3	PM	4.8	
02	Wood-Fired Boiler	PM	16.6	72.4
		Chlorine	0.02	0.05
		Formaldehyde	0.02	0.06
		Arsenic	<0.01	<0.01
03	Existing Line Press Vents - Line 1	Formaldehyde	0.63	2.74
		Methanol	0.99	4.35
06	Flexible Manufacturing Line Press Vents - Line 2	Formaldehyde	0.66	2.86
		Methanol	1.04	4.54
07	Truck Loadout	PM	0.4	1.6

- Visible emissions will not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 4 - Visible Emissions

SN	Limit	Regulatory Citation
01	5%	18.501
02	15%	18.501
04	5%	18.501
05	5%	18.501
07	5%	18.501

- The permittee will not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]
- The permittee will not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [§18.901 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. The permittee shall measure the amount of wood waste delivered through the screw conveyors for the fuel silo and the truck loadout and use that measurement to calculate the emissions from the baghouses (SN's 01, 04, and 05). No more than 13.3 tpy of PM/PM₁₀ shall be emitted from SN's 01, 04, and 05 per consecutive 12 month period. See Appendix A for calculation method. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
7. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition #6. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
8. The wood-fired boiler (SN-02) shall be tested once every three years for particulate matter, oxides of nitrogen, and carbon monoxide, using EPA Reference Methods 5, 7E, and 10, respectively. The boiler shall be operating within 90% of its maximum capacity during this testing. If the boiler is operating at a rate less than 90% during the compliance test, then the permittee shall be limited to 110% of the tested rate. [§19.702 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective February 15, 1999 (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
9. Woodwaste shall be the only fuel fired in the boiler. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
10. The permittee shall not burn more than 6,830 tons of woodwaste in the wood-fired boiler (SN-02) per consecutive 12 month period. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
11. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition #10. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
12. The permittee shall keep a monthly VOC and formaldehyde emission inventory in the form of Attachment B. Each monthly inventory shall be completed and available for inspection by Department personnel by the last day of the month after the month being reported. These records shall be kept on site and be made available upon request to Department personnel. Each monthly inventory shall include the gallons of each type of resin and catalyst used, the density of each material, the VOC content of each material, and the formaldehyde content of each resin used. These parameters shall be used to calculate the VOC and formaldehyde emissions for each calendar month and rolling twelve month total. The formaldehyde emissions shall be calculated by taking 50% of the formaldehyde content in the amount of resin used. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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13. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition #12. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated May 22, 2000.

Table 5 - Insignificant Activities

Description	Category
Natural Gas Fired Boiler 5.021 mmbtu/hr	Group A, Item 1

Section VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
3. The permittee will notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [§19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [§19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [§19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [§19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Arkansas Department of Environmental
Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

7. The permittee will test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start-up of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) days after the completion of testing. [§19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
8. The permittee will provide: [§19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. Sampling ports adequate for applicable test methods
 - b. Safe sampling platforms
 - c. Safe access to sampling platforms
 - d. Utilities for sampling and testing equipment
9. The permittee will operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee will maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [§19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [§19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.

- b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
 - c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.
11. The permittee shall allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act;
 - c. To inspect any monitoring equipment or monitoring method required in this permit;
 - d. To sample any emission of pollutants; and
 - e. To perform an operation and maintenance inspection of the permitted source.
12. The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [§19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of

the receipt of the disclosure statement. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [§19.407(B) of Regulation 19 and/or §18.307(B) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]

APPENDIX A

Attachment A

Calculation Method:

w_r = weight of wood delivered per rotation

n_r = number of rotations per month

wood delivered per month = $w_r \times n_r = w_m$

e = baghouse efficiency = 99.9%

= amount of wood waste collected and sent through screw conveyors

total amount of wood waste = $w_m / .999 = T$

baghouse emissions = $T - w_m = E$

SUM								

Calculations: VOC Emissions (lb/month)

$$= (\text{column 3})(\text{column 4})(\text{column 6})$$

Formaldehyde Emissions (lb/month)

$$= (\text{column 3})(\text{column 5})(\text{column 6})(0.50)$$