ADEQ MINOR SOURCE AIR PERMIT

Permit #: 1712-AR-2

IS ISSUED TO:

Maxwell Hardwood Flooring, Inc. 190 Wilson Mill Road Monticello, AR 71655 Drew County CSN: 22-0064

THIS PERMIT IS YOUR 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 YOUR 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:	
Keith A. Michaels	Date Amended

SECTION I: FACILITY INFORMATION

PERMITTEE: Maxwell Hardwood Flooring, Inc.

CSN: 22-0064 PERMIT NUMBER: 1712-AR-2

FACILITY ADDRESS: 190 Wilson Mill Road

Monticello, AR 71655

COUNTY: Drew

CONTACT POSITION: Thomas Maxwell, President

TELEPHONE NUMBER: (870) 367-2346 FAX NUMBER: (870) 367-2968

REVIEWING ENGINEER: M. Lloyd Davis, P. E.

UTM North-South (Y): Zone 15 [3716.310 km]

UTM East-West (X): Zone 15 [612.100 km]

Permit #: 1712-AR-2

CSN: 22-0064

SECTION II: INTRODUCTION

Summary

The Maxwell Hardwood Flooring Plant located at 190 Wilson Mill Road in Monticello, Drew County, Arkansas, will process approximately 1,800,000 board feet of hardwood flooring per month when this proposed modification is implemented. This permit modification adds an additional production line that will be installed and put in operation to increase the output of this plant. This new line will process about 800,000 board feet per month, increasing the total production to 1,800,000 board feet output.

Process Description

The company currently manufactures hardwood flooring from rough sawed hardwood lumber which is purchased offsite. This green rough sawed hardwood lumber is received into the mill yard in an area near the front entrance. The lumber is unloaded from trucks and stacked in sheds, where the drying process begins. The lumber is systematically moved by forklift from the receiving sheds around to the stacking shed. This is the point where the lumber is graded and re-stacked using approximately 1 inch thickness stacking strips between each layer of lumber to facilitate drying, and then moved into the pre-drier shed. This pre-drier shed holds around 750,000 board feet of lumber. The lumber remains in this shed for about forty-five (45) days. The pre-drier shed is held at a constant 90 degree temperature. When heat is necessary during the colder months steam from both the wood waste fired boiler and a natural gas fired boiler is channeled to radiant heat units in the shed to provide the heat and maintain the temperature.

Lumber is moved from the pre-drier shed and from the yard into the five dry kilns (SN-03) for final drying. The lumber is left in the dry kilns for a period of ten (10) days to reduce the moisture down to approximately six to eight percent. The heat needed in the three existing kilns is supplied from a wood waste fired boiler (SN-01). Two new kilns are heated by a new 300 HP natural gas fired boiler (SN-02). The boiler is only used to supply heat into the pre-drying shed and into the kilns themselves. The three old kilns hold 100,000 board feet each.

The kiln dried lumber is moved from the kilns, after being normalized, into a place of dry storage. Also, some kiln dried lumber is purchased offsite. This dry storage consists of several sheds located near the front of the mill yard. Since the planer mill has been placed out of service, it is being used to store kiln dried lumber. The lumber remains in the dry storage sheds until it is needed for the flooring mill operation.

Permit #: 1712-AR-2

CSN: 22-0064

All machines in the flooring mill shed are connected to metal ducts which air convey the sawdust to a large fuel house (SN-04) located behind the boiler shed, and to a new load out bin and cyclone east of the rail line for offsite sales. Large fans apply positive air pressure to this duct system. A new hog sends chips to the new loadout bin (SN-06) controlled by a cyclone (SN-15). There is approximately 20 to 24 percent waste generated in the manufacturing process. Since this is more than is needed to fire the boiler, excess wood waste is sold as fuel. Approximately four (4) truckloads per week are loaded out of the peerless loading bin (SN-05and SN-07) and seven (7) truck loads are loaded from the new bin (SN-06) and shipped offsite to be used as fuel at another facility. The loading bins are connected to the fuel house and new load out bin by metal ductwork. The fuel house has four large cyclones (SN-09, SN-10, SN-11, and SN-12) which are used as receiving for the wood waste, chips and sawdust, placing them in the fuel house. The boiler house has one cyclone (SN-08) on top of the building, which collects the fine dust when the fuel is conveyed into the boiler. It should be noted here that the boiler operation is a twenty-four (24) hour per day, on going, 365 day per year operation, whereas the actual production lines run only for forty (40) hour per week, for four days at 9 hours/ work day plus one 4 hour work day. The peerless bin load out requires an average of five minutes per truck.

This permit will also allow the installation of an additional emission control cyclone (SN-16), designated 'J', in series from Cyclone 'G' (SN-13), in conjunction with a 100 Hp Phelps fan air blower from SN-13. SN-13 will no longer exhaust directly to the atmosphere, but emissions from this source will be further reduced by 80%.

The kiln dried lumber is systematically removed from the dry storage sheds and introduced into the flooring mill. The first operation in the flooring mill is passing the lumber through the ripsaw. The rip saw sizes the lumber into the desired widths of flooring to be manufactured. The wood waste from the rip saw goes on a conveyer to the hammer type hog. The sawdust is conveyed by positive pneumatic conveyance to the fuel house and new load out bin. The rough knot saw or defect saw is located immediately after the rip saw. The lumber is checked and defects are cut from the hardwood lumber. At this point, the lumber is passed on to the side matcher. The wood waste that is cut from the lumber is sent on the conveyer to the hog, while the sawdust and shavings are pulled by air conveyance into the fuel house. The side matcher or planer is the machine that dresses the sides of the lumber and prepares it for its next operation. This operation is the finish knot saw or defect saw. The dressed lumber is inspected once again and additional defects, if found, are cut from the lumber at this point. The defective lumber removed by this sawing operation is chain conveyed to the hog while the sawdust is transported to the fuel house through the duct system overhead in the building.

Permit #: 1712-AR-2

CSN: 22-0064

Tongue and groove is applied at this stage of the operation around the edges of the lumber. The lumber is fed first from the finish knot saw into the tongue end-matcher, which cuts the tongue portion around the edges of the lumber. Then the flooring material is passed through the groove end-matcher, which cuts the groove on the desired edges of the lumber to complete the manufacturing operation.

Once the lumber has been converted to hardwood flooring, it goes to grading tables within this same building where the various grades of lumber and types of hardwood are sorted and labeled to be packaged. These individual packages are then stacked in larger bundles and banded. Once they are banded together in the large bundles, they are wrapped in plastic and set aside to be loaded on trucks for shipment to the consumer.

Regulations

This facility is subject to regulation under the Arkansas Air Pollution Control Code (Regulation 18) and the State Plan of Implementation for Air Pollution Control (Regulation 19).

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

TOTAL ALLOWABLE EMISSIONS			
Pollutant	Emission Rates		
	lb/hr tpy		
PM	52.10	73.32	
PM_{10}	52.10	73.32	
SO_2	0.03	0.12	
VOC	1.90	8.27	
CO	2.61	11.37	
NO_x	0.53 2.32		

Permit #: 1712-AR-2

CSN: 22-0064

SECTION III: PERMIT HISTORY

The original air permit for this facility, #1712-A, was issued on September 23, 1996.

Air permit #1712-AR-1 was issued on October 31, 1997, and allowed 61.8 tpy of particulates, including 21.2 tpy of PM_{10} .

Permit #: 1712-AR-2

CSN: 22-0064

SECTION IV: EMISSION UNIT INFORMATION

Specific Conditions

1. Pursuant to §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, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	tpy
01	Woodwaste Fired Boiler 3,375,000 Btu/hour	PM ₁₀ SO ₂ VOC CO NO _x	3.30 0.03 0.06 2.48 0.14	14.45 0.12 0.24 10.84 0.63
02	Natural Gas Fired Boiler 3,350,000 Btu/hour	VOC CO NO _x	0.03 0.08 0.34	0.12 0.31 1.47
03	Dry Kilns (3)	PM ₁₀ VOC -CO	0.37 1.81 0.05	1.59 7.91 0.22
04	Fuel Storage House	PM_{10}	8.37	8.74
05	Peerless Loading Bin	PM_{10}	11.21	11.70
06	Loadout Bin II	PM_{10}	11.95	12.48
07	Peerless Bin Cyclone "A"	PM_{10}	2.0	2.08
08	Boiler House Cyclone "B"	PM_{10}	2.0	8.76
09	Fuel House Cyclone "C"	PM_{10}	2.0	2.08
10	Fuel House Cyclone "D"	PM_{10}	2.0	2.08
11	Fuel House Cyclone "E"	PM_{10}	2.0	2.08
12	Fuel House Cyclone "F"	PM_{10}	2.0	2.08
13, 16	Fuel House Cyclone "G" + Fuel House Cyclone "J"	PM	0.9	0.94

Permit #: 1712-AR-2

CSN: 22-0064

SN	Description	Pollutant	lb/hr	tpy
14	Fuel House Cyclone "H"	PM_{10}	2.0	2.08
15	Fuel House Cyclone "I"	PM_{10}	2.0	2.08

2. Pursuant to §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, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	tpy
01	Woodwaste Fired Boiler	PM	3.30	14.45
03	Dry Kilns (3)	PM	0.37	1.59
04	Fuel Storage House	PM	8.37	8.74
05	Peerless Loading Bin	PM	11.21	11.70
06	Loadout Bin II	PM	11.95	12.48
07	Peerless Bin Cyclone "A"	PM	2.0	2.08
08	Boiler House Cyclone "B"	PM	2.0	8.76
09	Fuel House Cyclone "C"	PM	2.0	2.08
10	Fuel House Cyclone "D"	PM	2.0	2.08
11	Fuel House Cyclone "E"	PM	2.0	2.08
12	Fuel House Cyclone "F"	PM	2.0	2.08
13, 16	Fuel House Cyclone "G" + Fuel House Cyclone "J"	PM	0.9	0.94
14	Fuel House Cyclone "H"	PM	2.0	2.08
15	Fuel House Cyclone "I"	PM	2.0	2.08

Permit #: 1712-AR-2

CSN: 22-0064

3. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, visible emissions shall not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
01	40%	18.501(A)(1)
02	5%	18.501(A)
03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15	20%	18.501(A)(2)

- 4. Pursuant to §18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall 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.
- 5. Pursuant to §18.901 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne.

SN-01 Conditions

- 6. Pursuant to \$19.705 of Regulation 19 and A.C.A. \$8-4-203 as referenced by \$8-4-304 and \$8-4-311, the permittee shall not produce more than 67,840 lbs of steam in a 24 hour period or more than 24.76 MM lbs of steam at SN-01 per consecutive 12 month period.
- 7. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain daily and 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.

Permit #: 1712-AR-2

CSN: 22-0064

SN-02 Conditions

8. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not produce more than 67,337 of steam in a 24 hour period or more than 24.58 MM lbs of steam at SN-02 per consecutive 12 month period.

9. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain daily and monthly records which demonstrate compliance with Specific Condition #8. 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.

Facility Wide Conditions

- 10. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not process more than 1.8 million board feet of hardwood lumber per month or more than 21.6 million board feet of hardwood lumber per consecutive 12 month period.
- 11. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 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.

Permit #: 1712-AR-2

CSN: 22-0064

SECTION V: INSIGNIFICANT ACTIVITIES

The following types of activities or emissions are deemed 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 **February 20, 2001.**

Description	Category
None submitted	

Permit #: 1712-AR-2

CSN: 22-0064

SECTION VI: GENERAL CONDITIONS

- 1. Any terms or conditions included in this permit which 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 which 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. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall 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 thereunder.
- 3. Pursuant to §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, the Department shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
- 4. Pursuant to §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, construction or modification must commence within eighteen (18) months from the date of permit issuance.
- 5. Pursuant to §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, records must be kept for five years which will 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 records may be used, at the discretion of the Department, to determine compliance with the conditions of the permit.

Permit #: 1712-AR-2

CSN: 22-0064

6. Pursuant to \$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, any reports required by any condition contained in this permit shall be certified by a responsible official and submitted to the Department at the address below.

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

- 7. Pursuant to §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, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
- 8. Pursuant to \$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, the permittee shall provide:
 - 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. Pursuant to §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, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

Permit #: 1712-AR-2

CSN: 22-0064

- 10. Pursuant to §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, if the permittee exceeds an emission limit established by this permit, they shall be deemed in violation of said permit and shall 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:
 - 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 that all reasonable measures have been taken 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 shall 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, it need not be submitted again.
- 11. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall allow representatives of the Department upon the presentation of credentials:
 - 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
 - e. To perform an operation and maintenance inspection of the permitted source
- 12. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit is issued 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.

Permit #: 1712-AR-2

CSN: 22-0064

- 13. Pursuant to §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, this permit shall be subject to revocation or modification when, in the judgment of the Department, such revocation or modification shall become necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
- 14. Pursuant to §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, this permit may be transferred. An applicant for a transfer shall 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. A transfer may be denied on the basis of the information revealed in the disclosure statement or other investigation or, if there is deliberate falsification or omission of relevant information.
- 15. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be available for inspection on the premises where the control apparatus is located.
- 16. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.
- 17. Pursuant to Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit supersedes and voids all previously issued air permits for this facility.

APPENDIX A

Plot Plan

Thomas Maxwell, President Maxwell Hardwood Flooring, Inc. 190 Wilson Mill Road Monticello, AR 71655

Re: Notice of Administrative Amendment

CSN: <u>22-0064</u> Permit No.: <u>1712-AR-2</u>

Dear Mr. Maxwell:

Enclosed are the following amendments to <u>Permit 1712-AR-2</u> completed in accordance with the provisions of Section 19.407 (A) of Regulation No.19, *Regulations of the Arkansas Plan of Implementation for Air Pollution Control*.

- (18) Page 4: Description of the new cyclone (SN-16) and blower to be installed in series with SN-13 to reduce emissions from this source.
- (19) Page 5: Reduction in total allowable particulates to 73.32 tpy.
- (20) Pages 7 and 8: Reduction in allowable PM and PM₁₀ emissions from SN-13 and SN-16 combined as a single source to 0.94 tpy.

Please place the revised permit in your files.

Sincerely,

Keith A. Michaels Chief Air Division

LD

Enclosure(s)

cc: EMTECH, 1209 Third Street, Little Rock, AR 72201