

Purley
13-1147Q
083-00025

ARMSTRONG HARDWOOD FLOORING
P.O. Box 160 Route 250 South
Beverly, WV 26253
www.armstrong.com

March 10, 2015

West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304



**Subject: Air Permit Administrative Update Application
Armstrong Hardwood Flooring – Beverly, WV
Plant ID 08300025
Permit No. R13-1147P, Title V Permit No. R30-08300025-2013**

Dear Sir or Madam:

Please find attached an administrative update application for the Armstrong Hardwood Flooring facility located in Beverly, West Virginia. The purpose of this application is to update the air permit based on the proposed relocation of flooring mill equipment to improve process efficiency. To accommodate those changes, ductwork and air flows are being adjusted and rebalanced. These changes will impact the inlet air flow rates to Baghouse Nos. 2, 3, 7, and 8. No physical changes will take place for either the cyclones or baghouses which control PM and PM₁₀ emissions from the affected equipment.

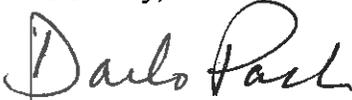
To update the permit to reflect the proposed changes, the following permit condition revisions are proposed:

- To the Emission Unit Table in Condition 1.0:
 - Revise the emission sources exhausting to No. 2 Baghouse from Nos. 1 and 2 Flooring Mill Lines to Nos. 2 and 5 Flooring Mill Lines and add the Flooring Mill Rough End.
 - Revise the emission sources exhausting to No. 5 Baghouse from No. 4 Flooring Mill Line to No. 3 Flooring Mill Line and add the Visually Distressed Flooring Line.
 - Revise the emission sources exhausting to No. 7 Baghouse from No. 3 Flooring Mill Line to No. 1 Flooring Mill Line. The Flooring Mill Rough End and No. 1 Wood Hog will remain as emission sources exhausting to this baghouse.
 - For clarification purposes only, add a reference to the Main Relay Line from No. 6 Cyclone as an emission source to Baghouse No. 6. No physical changes to the equipment were made for equipment exhausting to this baghouse.
- Revise the tables of maximum PM emission rates for the baghouses in Conditions 5.1.1 and 6.1.1 to reflect the maximum emission rates based on design capacity of each baghouse.

No new permit conditions or regulatory requirements are expected to be necessary to reflect the change in the facility's operations.

For questions regarding any information contained in this application, contact Dennis J. Ruth, EHS Manager for the plant at (304) 338-7619 or Otto Iskandar, Maintenance and Reliability Manager for Armstrong Flooring Products Wood Division at (214) 789-6321.

Sincerely,

A handwritten signature in cursive script that reads "Dario D. Pack". The signature is written in black ink and is positioned above the printed name.

Dario D. Pack

Attachments

March 10, 2015

Prepared for:

ARMSTRONG HARDWOOD FLOORING COMPANY

P.O. Box 160
Beverly, WV 26253

**AIR PERMIT ADMINISTRATIVE UPDATE
ARMSTRONG HARDWOOD FLOORING
COMPANY – BEVERLY PLANT
Beverly, West Virginia**

Prepared by:



1050 Crown Pointe Parkway, Suite 550
Atlanta, Georgia 30338
Tel: 404-315-9113

March 2015

AIR PERMIT ADMINSTRATIVE UPDATE

ARMSTRONG HARDWOOD FLOORING COMPANY – BEVERLY PLANT
P.O. BOX 160
BEVERLY, WV 26253

Prepared for:

ARMSTRONG HARDWOOD FLOORING COMPANY – BEVERLY PLANT
P.O. Box 160
Beverly, WV 26253

Prepared by:



1050 Crown Pointe Pkwy, Suite 550
Atlanta, GA 30338
Tel: 404-315-9113

Sandra P. Alvarado, PE
Senior Engineer

March 2015



AIR PERMIT ADMINISTRATIVE UPDATE

ARMSTRONG HARDWOOD FLOORING COMPANY – BEVERLY PLANT
P.O. Box 160
Beverly, WV 26253

March 2015

TABLE OF CONTENTS

1	INTRODUCTION	1
	1.1 General Facility Operations	1
	1.2 Application Contacts	2
2	EMISSIONS & REGULATORY IMPACTS	3
3	REQUESTED PERMIT CHANGES	4

APPENDICES

Appendix A:	Rule 13 Permit Markup (R13-1147P)	6
Appendix B:	Combined Permit Application Form	38

ATTACHMENTS

Attachment A:	Certificate of Business Registration	43
Attachment C:	Schedule of the Planned Changes	45
Attachment D:	Regulatory Discussion & Applicability Review	53
Attachment E:	Site Plan	55
Attachment F:	Process Flow Diagram	57
Attachment G:	Process Description	59
Attachment I:	Emission Units Table	61
Attachment N:	Supporting Emissions Calculations	63
Attachment O:	Monitoring, Recordkeeping, Reporting, and Testing Plans	66

1 INTRODUCTION

The Armstrong Hardwood Flooring Company – Beverly Mill is submitting an administrative update application to update the air permit based on the proposed relocation of Flooring Mill equipment to improve process efficiency. To accommodate those changes, ductwork and air flows are being adjusted and rebalanced. These changes will impact the inlet air flow rates to Baghouse Nos. 2, 3, 7, and 8. No physical changes will take place for either the cyclones or baghouses which control PM and PM₁₀ emissions from the affected equipment.

Attachments C and C-1 provide the schedule for and a detailed list of the equipment and ductwork changes proposed at the facility. Attachment C-2 and C-3 provide an illustration of the current and future site plans. Changes to the Emission Units table in Condition 1.0 of the permit include:

- Revise the emission sources exhausting to No. 2 Baghouse from Nos. 1 and 2 Flooring Mill Lines to Nos. 2 and 5 Flooring Mill Lines and add the Flooring Mill Rough End.
- Revise the emission sources exhausting to No. 5 Baghouse from No. 4 Flooring Mill Line to No. 3 Flooring Mill Line and add the Visually Distressed Flooring Line.
- Revise the emission sources exhausting to No. 7 Baghouse from No. 3 Flooring Mill Line to No. 1 Flooring Mill Line. The Flooring Mill Rough End and No. 1 Wood Hog will remain as emission sources exhausting to this baghouse.
- For clarification purposes only, add a reference to the Main Relay Line from No. 6 Cyclone as an emission source to Baghouse No. 6. No physical changes to the equipment were made for equipment exhausting to this baghouse.

1.1 General Facility Operations

Green lumber is purchased and stacked in the Mill Yard to facilitate air drying of the lumber. The lumber is then further dried in the steam heated pre-dryer and/or one of 38 lumber kilns. Kiln-dried lumber is transferred by one of three lumber tilts to the Mill rough end saws. The rough end saws cut the lumber into strips for transfer to one of six lines of knot saws, side matchers, and end matchers. The unfinished wood flooring is graded, stacked and either stored or transferred to one of two finishing lines. Finished hardwood flooring is graded and packaged for shipment to mill customers. Two wood-fired boilers provide heat and steam to the plant.

Attachment F provides a more detailed process flow diagram specific to the Flooring Mill operations.

1.2 Application Contacts

The contact persons for questions regarding any information in this permit application are:

Dennis J. Ruth, EHS Manager for the Beverly Plant: 304-338-7619, DJRuth@Armstrong.com

Otto Iskandar, Maintenance and Reliability Manager for Armstrong Flooring Products Wood Division: 214-789-6321, OIskandar@Armstrong.com; and

Sandra P. Alvarado, Senior Engineer for EPS: 678-336-8542, salvarado@envplanning.com.

2 EMISSIONS & REGULATORY IMPACTS

For the purposes of this application, the pollutants of concern were PM and PM₁₀. The proposed project does not include any physical modification to the cyclones and baghouses which control PM emissions from the Flooring Mill. Therefore, potential emissions from the Flooring Mill will not change. Detailed emissions calculations for the proposed changes are provided in Attachment N. A summary of the change in actual emissions is provided in Table 2.1:

Table 2.1 – Change in Emissions

Emission Point ID	Baghouse	Change in Actual PM Emissions (tons/yr)	Change in Actual PM₁₀ Emissions (tons/yr)
S04	No. 2 Baghouse	2.10	0.42
S05	No. 3 Baghouse	2.84	0.57
S10	No. 7 Baghouse	3.96	0.79
S11	No. 8 Baghouse	4.62	0.92

Since the proposed changes do not include modifications to the control equipment for the Flooring Mill or result in a change to the potential emission from the Flooring Mill, no state or federal regulations will be triggered by this change and no new standards will apply to the Flooring Mill processes.

3 REQUESTED PERMIT CHANGES

In addition to the changes listed in Section 1, the following permit changes are being requested at this time:

During the review of the permit and most recent permit renewal application, it was determined that the maximum emission rates listed in Conditions 5.1.1 and 6.1.1 of the permit were established by calculating the allowable PM emission rates using the actual air flow through each baghouse from a previous permit application and not at the design capacity air flow rate for each baghouse.

Attachment N-1 provides the current actual air flow, the future planned actual air flow, and the design capacity of each baghouse and the corresponding PM emissions at each setting. Armstrong believes that the tables in Conditions 5.1.1 and 6.1.1 should reflect the true Maximum Emission Rates as provided in Table 3.1 below.

Table 3.1 – Proposed Maximum Emission Rates

Emission Unit	Emission Point ID No.	Maximum Emission Rates			
		PM		PM ₁₀	
		lb/hour	TPY	lb/hour	TPY
No. 1 Baghouse	S03	3.41	14.93	0.68	2.99
No. 2 Baghouse	S04	2.16	9.46	0.43	1.89
No. 3 Baghouse	S05	2.24	9.80	0.45	1.96
No. 4 Baghouse	S06	1.18	5.16	0.24	1.03
No. 5 Baghouse	S07	1.91	8.38	0.38	1.68
No. 6 Baghouse	S09	2.56	11.22	0.51	2.24
No. 7 Baghouse	S10	2.27	9.95	0.45	1.99
No. 8 Baghouse	S11	2.94	12.88	0.59	2.58

A markup of the Rule 13 permit is enclosed as Appendix A with the proposed changes to the permit.

APPENDIX A
RULE 13 PERMIT MARKUP (R13-1147P)

This permit will supersede and replace Permit R13-1147O.

Facility Location: Beverly, Randolph County, West Virginia
Mailing Address: PO Box 160
Beverly, WV 26253
Facility Description: Hardwood Flooring Manufacturing
NAICS Codes: 321918
UTM Coordinates: 597.41km Easting • 4,296.88 km Northing • Zone 17
Permit Type: Class I Administrative Update
Description of Change: Replacement of a stain spray booth with a roll coating operation.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

Table of Contents

1.0. Emission Units	4
2.0. General Conditions.....	8
2.1. Definitions	8
2.2. Acronyms.....	8
2.3. Authority.....	9
2.4. Term and Renewal.....	9
2.5. Duty to Comply	9
2.6. Duty to Provide Information.....	9
2.7. Duty to Supplement and Correct Information.....	10
2.8. Administrative Permit Update	10
2.9. Permit Modification.....	10
2.10 Major Permit Modification	10
2.11. Inspection and Entry	10
2.12. Emergency	10
2.13. Need to Halt or Reduce Activity Not a Defense.....	11
2.14. Suspension of Activities	11
2.15. Property Rights	11
2.16. Severability	12
2.17. Transferability.....	12
2.18. Notification Requirements	12
2.19. Credible Evidence.....	12
3.0. Facility-Wide Requirements.....	13
3.1. Limitations and Standards	13
3.2. Monitoring Requirements	14
3.3. Testing Requirements	14
3.4. Recordkeeping Requirements	15
3.5. Reporting Requirements	16
4.0. Source-Specific Requirements [Boilers (001-01, 001-02 & 001-03)].....	18
4.1. Limitations and Standards	18
4.2. Monitoring Requirements	20
4.3. Testing Requirements	21
4.4. Recordkeeping Requirements	21
4.5. Reporting Requirements	23
5.0. Source-Specific Requirements [Flooring Mill (003-01)]	23
5.1. Limitations and Standards	23
5.2. Monitoring Requirements	24
5.3. Testing Requirements	25
5.4. Recordkeeping Requirements	25
5.5. Reporting Requirements	25
6.0. Source-Specific Requirements [Finishing Lines (002-01 & 002-02)]	26
6.1. Limitations and Standards	26
6.2. Monitoring Requirements	27
6.3. Testing Requirements	29
6.4. Recordkeeping Requirements	28
6.5. Reporting Requirements	30
CERTIFICATION OF DATA ACCURACY.....	31

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001-01	S08	No. 1 Wood-Fired Boiler	1990	48.8 MMBtu/hr	Cyclone #2, Dry ESP (008)
001-02	S08	No. 2 Wood-Fired Boiler	1990	48.8 MMBtu/hr	Cyclone #2, Dry ESP (008)
001-03	S30	Propane Gas - Fired Boiler	2007	96.7 MMBtu/hr	N/A
002-01	S03	No. 1 Finishing Line	1993	8,500 ft ² /hr	Baghouse (003)
002-01A	S12.01	No. 1 Finish Line - Rollcoaters (2) (apply stain and/or water)	1993	10.11 gal/hr (stain)	Baghouse (003)
002-01B	S13.01	Vacuum Stain Table	1993	N/A	N/A
002-01C	S14.01	No. 1 Finish Line – Stain Oven	1993	1.6 MMBtu/hr	N/A
002-01D	S15.01	UV Lights	1993	300 Watts	N/A
002-01D.1	S15.01.1	No. 1 Finish Line – DE-Nibbers (3 Head)	2009	NA	Baghouse (003)
002-01D.2	S15.01.2	Fill Coater	2009	6 gal/hr	N/A
002-01D.3	S15.01.3	UV Oven	2009	300 Watts	N/A
002-01D.4	S15.01.4	No. 1 Finish Line –DE-Nibbers (3 Head)	1993	NA	Baghouse (003)
002-01E	S16.01	No. 1 Finish Line – Sealer #1	1993	6.0 gal/hr	N/A
002-01F	S17.01	UV Lights, Exhaust A	1993	175-275 MJ	N/A
002-01G	S18.01	UV Lights, Exhaust B	1993	175-275 MJ	N/A
002-01H	S19.01	No. 1 Finish Line – Sealer #2	1993	6.0 gal/hr	N/A
002-01I	S20.01	UV Lights, Exhaust A	1993	450-650 MJ	N/A
002-01J	S21.01	UV Lights, Exhaust B	1993	450-650 MJ	N/A
002-01D.5	S21.01.1	No. 1 Finish Line – DE-Nibbers (3 Head)	1993	NA	Baghouse (003)
002-01K	S22.01	No. 1 Finish Line – Topcoat Rollcoater 1	1993	6.0 gal/hr	N/A
002-01L	S23.01	UV Lights, Exhaust A	1993	175-275 MJ	N/A
002-01M	S24.01	UV Lights, Exhaust B	1993	175-275 MJ	N/A
002-01N	S25.01	No. 1 Finish Line – Topcoat Rollcoater 2	1993	6.0 gal/hr	N/A
002-01O	S26.01	No. 1 Finish Line – Topcoat Rollcoater 3	1993	6.0 gal/hr	N/A
002-01P	S27.01	UV Lights, Exhaust A	1993	750-1000 MJ	N/A
002-01Q	S28.01	UV Lights, Exhaust B	1993	750-1000 MJ	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
002-02	S03	No. 2 Finish Line	1993	8,500 ft ² /hr	Baghouse (003)
002-02A	S12.02	No. 2 Finish Line - Rollcoaters (2) (apply stain or water)	1993	10.11 gal/hr (stain)	N/A
002-02B	S13.02	Vacuum Stain Table	1993	N/A	N/A
002-02C	S14.02	No. 2 Finish Line – Stain Oven	1993	1.6 MMBtu/hr	N/A
002-02D	S15.02	UV Lights	1993	300 Watts	N/A
002-02J.1	S15.02.1	No. 2 Finish Line –DE-Nibbers (3 Head)	1993	NA	Baghouse (003)
002-02E	S16.02	No. 2 Finish Line – Sealer #1	1993	6.0 gal/hr	N/A
002-02F	S17.02	UV Lights, Exhaust A	1993	175-275 MJ	N/A
002-02G	S18.02	UV Lights, Exhaust B	1993	175-275 MJ	N/A
002-02H	S19.02	No. 2 Finish Line – Sealer #2	1993	6.0 gal/hr	N/A
002-02I	S20.02	UV Lights, Exhaust A	1993	450-650 MJ	N/A
002-02J	S21.02	UV Lights, Exhaust B	1993	450-650 MJ	N/A
002-02J.2	S21.02.1	No. 2 Finish Line – DE-Nibbers (3 Head)	1993	NA	Baghouse (003)
002-02K	S22.02	No. 2 Finish Line – Topcoat Rollcoater 1	1993	6.0 gal/hr	N/A
002-02L	S23.02	UV Lights, Exhaust A	1993	175-275 MJ	N/A
002-02M	S24.02	UV Lights, Exhaust B	1993	175-275 MJ	N/A
002-02N	S25.02	No. 2 Finish Line – Topcoat Rollcoater 2	1993	6.0 gal/hr	N/A
002-02O	S26.02	No. 2 Finish Line – Topcoat Rollcoater 3	1993	6.0 gal/hr	N/A
002-02P	S27.02	UV Lights, Exhaust A	1993	750-1000 MJ	N/A
002-02Q	S28.02	UV Lights, Exhaust B	1993	750-1000 MJ	N/A
002-03A	NA	Wood Branding Device, Hood, Filtering System, and Sundry Equipment	2009	60 ft ² /hr (est. avg.)	Filtering System
002-04A	S12.04 connected to S03	Soft Scrape Cell	2010	5,000 ft ² /shift	Baghouse (003)
003-01	S04-S11	Flooring Mill	1990	29,500 ft ² per 8 hr shift (Output)	Baghouses (004-007 & 009-018)
003-01	F02	Flooring Mill – Truck Loadout No. 1	1991	528 tons/day	N/A
003-01	F03	Flooring Mill – Truck Loadout No. 2	2005	528 tons/day	N/A
003-01	F04	Flooring Mill – Silo I	1990	195 tons	N/A
003-01	F05	Flooring Mill – Silo II	1990	195 tons	N/A
003-01	F06	Flooring Mill – Silo III	1990	195 tons	N/A
003-01	F01	Yard Operations – Haul Roads	1990	0.86 Miles	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
003-02	S07	Visually Distressed Flooring Line (planer, denibber, sander, scuffer)	2012	1,375 ft ² /hr	007
003-02A	S29	Vacuum Table	2012	1,375 ft ² /hr	N/A
003-02B	S30	Stain Coater	2012	1,375 ft ² /hr	N/A
003-02C	S31	Stain Wipe	2012	1,375 ft ² /hr	N/A
003-02D	S32	Oven	2012	1,375 ft ² /hr	N/A
003-03	S07	Visually Distressed Flooring Line (planer, sander, brushing, rework)	2014	1,375 ft ² /hr	007
004-01	N/A	Yard Operations – Lumber Kilns (steam-heated predryer and 38 steam-heated lumber kilns to dry green lumber).	Various	130,000,000 Board-ft/yr	N/A
N/A	N/A	Edge Coaters, parts washers, welding operations, and other activities	Various	N/A	N/A
Control Devices					
N/A	S08	Dry Electrostatic Precipitator (Services No. 1 & No. 2 Boilers)	2003	9.6 KW	008
N/A	S03	No. 1 Baghouse (Services No. 1 and No. 2 Finish Line Sanders)	1993	79,556 ACFM	003
N/A	S04	No. 2 Baghouse (Services No. 12 & No. 25 Flooring Mill Lines & Flooring Mill Rough End)	1990	50,373 ACFM	004
N/A	S05	No. 3 Baghouse (Services No. 5 & No. 6 Flooring Mill Lines)	1990	52,227 ACFM	005
N/A	S06	No. 4 Baghouse (Services No. 3 Wood Hog (No. 3 Cyclone))	1990	27,489 ACFM	006
N/A	S07	No. 5 Baghouse (Services No. 2 Wood Hog (No. 4 Cyclone), & No. 34 Flooring Mill Line & Visually Distressed Flooring Line)	2003	44,628 ACFM	007
N/A	S09	No. 6 Baghouse (Services No. 4 Wood Hog (No. 1 Cyclone), & No. 1 Wood Hog (No. 5 Cyclone) & Main Relay Line (No. 6 Cyclone))	2005	59,748 ACFM	009
N/A	S10	No. 7 Baghouse (Services No. 31 Flooring Mill Line, Rough End & No. 1 Wood Hog (No. 7 Cyclone))	2005	52,990 ACFM	010
N/A	S11	No. 8 Baghouse (Services Flooring Mill Rough End)	2005	68,597 ACFM	011
N/A	S09	No. 1 Cyclone (From No. 4 Wood Hog to Silo II)	1990	24,100 ACFM	012
N/A	S05	No. 2 Cyclone (Boilers/ESP to Silo III)	1990	27,489 ACFM	018
N/A	S06	No. 3 Cyclone (From No. 3 Wood Hog to Silo III)	2004	6,500 ACFM	013

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
N/A	S07	No. 4 Cyclone (From No. 2 Wood Hog to No. 1 Cyclone)	2005	16,157 ACFM	014
N/A	S09	No. 5 Cyclone (From No. 7 Cyclone (No. 1 Wood Hog) to Silo I)	2005	4,768 ACFM	016
N/A	S09	No. 6 Cyclone (From No. 1, 2, 3, 4, & 5 Baghouses to No. 6 Baghouse)	2005	27,490 ACFM	017
N/A	S10	No. 7 Cyclone (From No. 1 Wood Hog, Exhaust to No. 7 Baghouse)	1990	24,100 ACFM	015

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the “West Virginia Air Pollution Control Act” or the “Air Pollution Control Act” mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The “Clean Air Act” means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. “Secretary” means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary’s designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM_{2.5}	Particulate Matter less than 2.5 μm in diameter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than 10μm in diameter
CO	Carbon Monoxide	Ppb	Pounds per Batch
C.S.R. or CSR	Codes of State Rules	Pph	Pounds per Hour
DAQ	Division of Air Quality	Ppm	Parts per Million
DEP	Department of Environmental Protection	Ppmv or ppmv	Parts per Million by Volume
dscm	Dry Standard Cubic Meter	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	Psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO₂	Sulfur Dioxide
lbs/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
M	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	TSP	Total Suspended Particulate
MDHI	Maximum Design Heat Input	USEPA	United States Environmental Protection Agency
MM	Million	UTM	Universal Transverse Mercator
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	VEE	Visual Emissions Evaluation
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour	VOC	Volatile Organic Compounds
NA	Not Applicable	VOL	Volatile Organic Liquids
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

2.4. Term and Renewal

- 2.4.1. This permit supersedes and replaces previously issued Permit R13-1147N. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-1147 through R13-1147O, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to; [45CSR§§13-5.11 and 10.3.]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1.]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] *[State Enforceable Only]*
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]
- 3.1.7. The facility-wide annual emission rate of hazardous air pollutants (HAPs) shall not exceed 9.4 tons per year of any single HAP, or 24.4 tons per year of aggregated HAPs. Facility-wide HAP emissions include, but are not limited to the potential to emit for the boilers (emission point S08), in addition to all other activities in the plant that involve the use of HAP-containing materials (i.e., finishing lines, clean-up activities, etc.). The annual emission limits shall be based on a 12-month rolling yearly total.
[45CSR§13-5.11.]
- 3.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any

more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11.]

- 3.1.9. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR§7-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time

during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language;
 2. The result of the test for each permit or rule condition; and,
 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]
- 3.4.3. For the purpose of demonstrating compliance with 3.1.7., refer to recordkeeping requirements per condition 6.4.2
- 3.4.4. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

- 3.4.5. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 3.4.6. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

If to the US EPA:
Associate Director
Office of Air Enforcement and Compliance
Assistance
(3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Operating Fee**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. Combined emissions from the two (2) 48.8 MMBtu/hr boilers (001-01, 001-02) shall be vented to and controlled by an electrostatic precipitator (008), prior to release to the atmosphere. Due to unavoidable malfunction or maintenance of the electrostatic precipitator, only one (1) boiler may be operated. The permittee shall keep records of all electrostatic precipitator shutdowns, and note which boiler is operated during this time period.

[45CSR§13-5.11.]

4.1.2. Maximum emissions to the atmosphere from the electrostatic precipitator (emission point ID: S08) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions ⁽¹⁾ (lb/hr)	Maximum Annual Emissions (ton/year) ⁽¹⁾
Nitrogen Oxides	24.20	106.00
Carbon Monoxide	51.56	225.85
Particulate Matter ⁽²⁾	16.34	71.60
Sulfur Dioxide ⁽³⁾	64.58	95.01
Volatile Organic Compounds	9.02	39.52
Hazardous Air Pollutants		
Acrolein	0.40	1.75
Benzene	0.41	1.80
Formaldehyde	0.43	1.88
Hydrogen Chloride (HCL)	1.86	8.15
Total Aggregated HAPs ⁽⁴⁾	3.76	16.46

(1) Maximum hourly and annual emissions limitations represent aggregated emissions from both boilers (001-01 & 001-02)

(2) The hourly particulate emission limit reflects the maximum allowable under 45CSR§2-4.1.c. for boilers 001-01 and 001-02.

(3) The hourly SO₂ emission limit is more stringent than the maximum allowable under 45CSR§10-3.3.f. (312.32 lb/hr). Compliance with this streamlined limit assures compliance with 45CSR§10-3.3.f.

(4) Total aggregated HAPs for the boilers listed above also include non-specified HAPs listed in the application.

[45CSR§13-5.11.]

- 4.1.3. Maximum emissions to the atmosphere from the 96.7 MMBTU/hr propane gas fired boiler (emission point ID: S30) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year) ⁽¹⁾
Nitrogen Oxides	20.12	4.02
Carbon Monoxide	3.39	0.68
Particulate Matter ⁽²⁾	0.64	0.13
Volatile Organic Compounds	0.53	0.11

(1) Maximum annual emissions limitations represent emissions associated with 400 hours of operation of the boiler.

(2) The hourly particulate matter emission limit is more stringent than the maximum allowable under 45CSR§2-4.1.b. (8.70 lb/hr). Compliance with this streamlined limit assures compliance with 45CSR§2-4.1.b.

[45CSR§13-5.11.]

- 4.1.4. The operation of the 96.7 MMBTU/hr propane gas fired boiler shall be limited to 400 hours of operation per year.

[45CSR§13-5.11.]

- 4.1.5. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1.]

- 4.1.6. Compliance with the visible emission requirements of subsection 4.1.5. shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director.

[45CSR§2-3.2.]

- 4.1.7. No person shall cause, suffer, allow or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

- a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;
- b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking or blowing of particulate matter from or by such vehicles or equipment; and
- c. Ash or fuel handling systems and ash disposal areas.

[45CSR§2-5.1.]

- 4.1.8. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
[45CSR§2-9.2.]
- 4.1.9. Unless otherwise approved by the Director, the maximum allowable emission rate for an individual stack shall not exceed by more than twenty-five percent (25%) the emission rate determined by prorating the total allowable emission rate specified in subsections 3.1, 3.2, or 3.3 of 45CSR10, on the basis of individual unit heat input at design capacity for all fuel burning units discharging through that stack.
[45CSR§10-3.4.a.]
- 4.1.10. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the opacity limit of 4.1.5., the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for the wood-fired boilers (001-01 & 001-02). The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40 CFR Part 60, Appendix A, Method 9 certification course.

These checks shall be performed at the stack (emission point S08) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

Visible emission checks shall be conducted on a weekly basis. If visible emissions are present, the permittee shall conduct an opacity reading using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the visible emission check. In accordance with Method 9, each observation shall be a minimum of six (6) minutes, unless any one 15 second reading is greater than the opacity limit, in which case the observation period shall be extended to a minimum of 60 minutes or until a violation of the emissions standard has been documented; whichever is a shorter period.

[45CSR§13-5.11.]

- 4.2.2. The permittee shall maintain and operate the electrostatic precipitator (ESP) in accordance with the manufacturer's specifications and with good air pollution control practices. This shall include monitoring of the secondary voltage and amperage for performance:

- a. Minimum secondary voltage of 20 kV, recorded once per shift;
- b. Minimum secondary amperage of 20 milliamps, recorded once per shift.

[45CSR§13-5.11.]

4.3. Testing Requirements

- 4.3.1. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit may be required to conduct or have conducted tests to determine compliance.
[45CSR§2-8.1.b.]
- 4.3.2. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in subsection 4.1. of 45CSR2.
[45CSR§2-8.1.c.]

4.4 Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
 - a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4 The permittee shall maintain records of all monitoring data required by 4.2.1. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. If the emission unit is out of service during the normal weekly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR§13-5.11.]

4.4.5 The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each of the two wood-fired fuel burning units (001-01 & 001-02). Such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis and a quarterly ash and BTU analysis. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electric form.

[45CSR§2-8.3.c., 8.3.d.; 45CSR§2A-7.1.a.3.]

4.4.6 The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in the propane gas-fired fuel burning units (001-03). Such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electric form.

[45CSR§2-8.3.c., 8.3.d.; 45CSR§2A-7.1.a.1.]

4.4.7 In order to determine compliance with the SO₂ emissions limits in condition 4.1.2 of this permit, the permittee shall conduct monthly wood sampling and analysis for sulfur content. The permittee will use the average monthly wood sulfur content values to calculate monthly and 12 month rolling total SO₂ emission rates.

4.5. Reporting Requirements

4.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

[45CSR§13-5.11.]

5.0. Source-Specific Requirements [Flooring Mill (003-01), Visual Distressed Flooring Lines (003-02) &(003-03)]

5.1. Limitations and Standards

5.1.1. Particulate matter emissions from each of the stacks venting from the baghouses shall be limited as follows:

Emission Unit	Emission Point ID No.	Maximum Emission Rates			
		PM ⁽¹⁾		PM ₁₀ ⁽²⁾	
		lb/hour	TPY	lb/hour	TPY
No. 2 Baghouse	S04	2.372.16	10.389.46	0.470.43	2.081.89
No. 3 Baghouse	S05	2.372.24	10.389.80	0.470.45	2.081.96
No. 4 Baghouse	S06	2.371.18	10.385.16	0.470.24	2.081.03
No. 5 Baghouse	S07	3.871.91	16.968.38	0.770.38	3.401.68
No. 6 Baghouse	S09	2.572.56	11.3011.22	0.510.51	2.302.24
No. 7 Baghouse	S10	2.272.27	9.959.95	0.450.45	1.991.99
No. 8 Baghouse	S11	2.942.94	12.8812.88	0.590.59	2.582.58

(1) Compliance with these particulate limits assures compliance with 45CSR§7-4.1.

(2) Based on the assumption that PM₁₀ is 20% of the PM emitted.

[45CSR§13-5.11.]

5.1.2. All cyclone systems (control device IDs: 012 – 017) shall be maintained and operated in accordance with manufacturer’s performance specifications.

[45CSR§13-5.11.]

5.1.3. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of 45CSR7.

[45CSR§7-3.1.]

5.1.4. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to section 5.1.5. is required to have a full enclosure and be equipped with a particulate matter control device.

[45CSR§7-3.7.]

5.1.5. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1.]

5.1.6. Combined VOC emissions from the Visual Distressed Flooring Lines (003-02 &003-03) shall not exceed 1.9 lb/hr nor 5.1 tons per year.

5.1.7 Only stains with 0% vHAP content shall be used in the Visual Distressed Flooring Lines.

5.2. Monitoring Requirements

5.2.1. For the purpose of determining compliance with the opacity limit of 5.1.3., the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for the Baghouses (004, 005, 006, 007, 009, 010, 011). The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted on a weekly basis. These checks shall be performed at the stack (emission points S3, S4, S5, S6, S7, S9, S10, S11) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present, the permittee shall conduct an opacity reading using the procedures and requirements of 45CSR7A as soon as practicable, but within seventy-two (72) hours of the visual emission check.

[45CSR§13-5.11.]

5.2.2. The permittee shall operate and maintain each baghouse and exhaust system in accordance with manufacturer’s specifications to ensure proper operation and 99.9% control efficiency. This shall include the prompt replacement of broken bags, proper fan operation, prompt replacement of fans and duct work, and daily inspections. Said inspections shall include conducting pressure drop measurements for each baghouse. The following pressure drop ranges have been determined to reflect normal operating conditions:

Control Device ID No.	Baghouse Specifications	
	Emission Unit	Pressure Drop ⁽¹⁾ (inches of H ₂ O)
004	No. 2 Baghouse	0.2 to 6.5
005	No. 3 Baghouse	0.2 to 6.5
006	No. 4 Baghouse	0.2 to 6.5
007	No. 5 Baghouse	0.2 to 6.5
009	No. 6 Baghouse	0.2 to 6.5
010	No. 7 Baghouse	0.2 to 6.5
011	No. 8 Baghouse	0.2 to 6.5

(1) The permittee may request changes to the specified pressure drop range(s), given appropriate documentation demonstrating that compliance with applicable requirements have been determined at that particular pressure drop reading.

[45CSR§13-5.11.]

- 5.2.3 In order to determine compliance with the emissions limits of condition 5.1.6 of this permit, the permittee shall maintain certifiable monthly records of the amount and VOC content of any stain used.

5.3. Testing Requirements

- 5.3.1. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.
[45CSR§7-8.1.]
- 5.3.2. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§7-8.2.]

5.4. Recordkeeping Requirements

- 5.4.1. The permittee shall maintain records of all monitoring data required by 5.2.1. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in 45CSR7A, the data records of each observation shall be maintained per the requirements of 45CSR7A. If the emission unit is out of service during the normal weekly evaluation, the record of observation may note "out of service" (O/S) or equivalent.
[45CSR§13-5.11.]
- 5.4.2. The permittee shall maintain records of monitoring data involved with the proper operation and daily inspections of the baghouses as specified in section 5.2.2., including pressure drop readings.
[45CSR§13-5.11.]

5.5. Reporting Requirements

- 5.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 45CSR7A must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR§13-5.11.]

6.0. Source-Specific Requirements [Finishing Lines (002-01 & 002-02)]

6.1. Limitations and Standards

6.1.1. Particulate matter emissions from each of the stacks venting from the baghouses shall be limited as follows:

Emission Unit	Emission Point ID No.	Maximum Emission Rates			
		PM ⁽¹⁾		PM ₁₀ ¹	
		lb/hour	TPY	lb/hour	TPY
No. 1 Baghouse	S03	2.37 3.41	10.38 14.93	0.47 0.68	2.08 2.99

(1) Compliance with these particulate limits assures compliance with 45CSR§7-4.1.

(2) Based on the assumption that PM10 is 20% of the PM emitted.

[45CSR§13-5.11.]

6.1.2. The hourly emission rate of VOCs from the two (2) finishing lines (Source ID #s 002-01, 002-02) including cleanup solvents shall not exceed 88.54 lb/hr.

[45CSR§13-5.11.]

6.1.3. The annual emission rate of VOCs from the two (2) finishing lines (Source ID #s 002-01, 002-02) including cleanup solvents shall not exceed 204.5 TPY.

[45CSR§13-5.11.]

6.1.4. In order to meet the facility-wide HAP limitations specified in 3.1.1., HAP emissions associated with the finishing lines (e.g., stain, sealer, fill coating, topcoat, cleaning solvents, etc.) shall be maintained at 5.64 tons per year of any single HAP and 7.94 tons per year aggregated HAPs.

[45CSR§13-5.11.]

6.1.5. The maximum processing rate to Finish Line #1 (Source ID# 002-01) and Finish Line #2 (Source ID# 002-02) shall not exceed 8,500 ft²/hr for each finishing line. Compliance with the Maximum Yearly processing rates shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of material processed at any given time during the previous twelve consecutive calendar months.

6.1.6. The Soft Scrape Cell (Source ID# 002-04A) shall be connected to Finish Line #1 (Source ID#002-01) and shall only be operated when one of the denibbers (Source ID# 002-01D.1) on Finish Line #1 (Source ID#002-01) is not operating.

6.1.7. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of 45CSR7.

[45CSR§7-3.1.]

6.1.8. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to subsection 5.1 of 45CSR7 is required to have a full enclosure and be equipped with a particulate matter control device.

[45CSR§7-3.7.]

- 6.1.9. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1.]

6.2. Monitoring Requirements

- 6.2.1. For the purpose of determining compliance with the opacity limit of 6.1.7., the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for the Baghouse (003). The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted on a weekly basis. These checks shall be performed at the stack (emission points S03) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present, the permittee shall conduct an opacity reading using the procedures and requirements of 45CSR7A as soon as practicable, but within seventy-two (72) hours of the visual emission check.

[45CSR§13-5.11.]

- 6.2.2. The permittee shall operate and maintain the baghouse and exhaust system in accordance with manufacturer's specifications to ensure proper operation and 99.9% control efficiency. This shall include the prompt replacement of broken bags, proper fan operation, prompt replacement of fans and duct work, and daily inspections. Said inspections shall include conducting pressure drop measurements for the baghouse. The following pressure drop range has been determined to reflect normal operating conditions:

Control Device ID No.	Baghouse Specifications	
	Emission Unit	Pressure Drop ⁽¹⁾ (inches of H ₂ O)
003	No. 1 Baghouse	0.2 to 6.5

(1) The permittee may request changes to the specified pressure drop range(s), given appropriate documentation demonstrating that compliance with applicable requirements have been determined at that particular pressure drop reading.

[45CSR§13-5.11.]

- 6.2.3 In order to determine compliance with the emissions limits of conditions 6.1.2 and 6.1.3 of this permit, the permittee shall maintain certifiable monthly records of the amount and VOC content of any coating used during the two roller coating process.

6.3. Testing Requirements

6.3.1. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.
[45CSR§7-8.1.]

6.3.2. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§7-8.2.]

6.4. Recordkeeping Requirements

6.4.1. For the purpose of determining compliance with conditions 6.1.2., and 6.1.3. the permittee shall maintain records of the following, on a monthly basis:

- a. Name and monthly usage of each material (e.g., stain, sealer, full coating, topcoat, cleaning solvents, etc.) as applied on a monthly basis;
- b. The VOC content of each material;
- c. Hours of operation for each coating line;

Additionally, within thirty (30) days of the last day of each calendar month, the permittee shall prepare a summary report that contains the following information: average hourly, monthly and rolling 12-month mass emissions of VOCs from the application of materials and hours of operation of application of materials at the facility. Records shall be maintained on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request.

[45CSR§13-5.11.]

6.4.2. For the purpose of determining compliance with conditions 3.1.1., and 6.1.4. the permittee shall maintain records of the following, on a monthly basis:

- a. Name and monthly usage of each HAP-containing material (e.g., stain, sealer, topcoat, cleaning solvents, etc.) as applied on a monthly basis;
- b. The speciated HAP content of each material (for HAP content ranges provided by the material manufacturer, the HAP content shall be the high-end of the range);
- c. Hours of operation for each coating line;

Additionally, within thirty (30) days of the last day of each calendar month, the permittee shall prepare a summary report that contains the following information: average hourly, monthly and rolling 12-month mass emissions of aggregate and speciated HAPs from the application of materials and hours of operation of application of materials at the facility, as well as the potential HAP emissions from the boilers. Records shall be maintained on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request.

[45CSR§13-5.11.]

6.4.3. To demonstrate compliance with section 6.1.5, the permittee shall maintain records of the amount of material processed on Finish Line #1 (Source ID# 002-01) and Finish Line #2 (Source ID# 002-02) respectively. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

6.4.4. The permittee shall maintain records of all monitoring data required by 6.2.1. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in 45CSR7A, the data records of each observation shall be maintained per the requirements of 45CSR7A. If the emission unit is out of service during the normal weekly evaluation, the record of observation may note "out of service" (O/S) or equivalent.

[45CSR§13-5.11.]

6.4.5. The permittee shall maintain records of monitoring data involved with the proper operation and daily inspections of the baghouse as specified in section 6.2.2., including pressure drop readings.

[45CSR§13-5.11.]

6.4.6. The permittee shall maintain copies of material safety data sheets, certified product data sheets, or manufacturer's formulations for each surface coating, fill coating, clean up solvent, and other related materials on site for a period of not less than five (5) years and shall be made available to the Director or his or her duly authorized representative upon request.

[45CSR§13-5.11.]

6.5. Reporting Requirements

6.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 45CSR7A must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

[45CSR§13-5.11.]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹ _____ Date _____
(please use blue ink) Responsible Official or Authorized Representative

Name & Title _____
(please print or type) Name Title

Telephone No. _____ Fax No. _____

¹ This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.



APPENDIX B
COMBINED PERMIT APPLICATION FORM



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
 601 57th Street, SE
 Charleston, WV 25304
 (304) 926-0475
www.dep.wv.gov/daq

APPLICATION FOR NSR PERMIT
AND
TITLE V PERMIT REVISION
(OPTIONAL)

PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF KNOWN):

- CONSTRUCTION MODIFICATION RELOCATION
 CLASS I ADMINISTRATIVE UPDATE TEMPORARY
 CLASS II ADMINISTRATIVE UPDATE AFTER-THE-FACT

PLEASE CHECK TYPE OF 45CSR30 (TITLE V) REVISION (IF ANY):

- ADMINISTRATIVE AMENDMENT MINOR MODIFICATION
 SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS ATTACHMENT S TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office): Armstrong Hardwood Flooring Company		2. Federal Employer ID No. (FEIN): 7 5 2 8 8 2 6 4 5	
3. Name of facility (if different from above): Beverly Plant		4. The applicant is the: <input type="checkbox"/> OWNER <input type="checkbox"/> OPERATOR <input checked="" type="checkbox"/> BOTH	
5A. Applicant's mailing address: P.O. Box 180 Beverly , WV 26253		5B. Facility's present physical address: Route 250 South Beverly , WV 26253	
6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO - If YES, provide a copy of the Certificate of Incorporation/Organization/Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A . - If NO, provide a copy of the Certificate of Authority/Authority of L.L.C./Registration (one page) including any name change amendments or other Business Certificate as Attachment A .			
7. If applicant is a subsidiary corporation, please provide the name of parent corporation:			
8. Does the applicant own, lease, have an option to buy or otherwise have control of the <i>proposed site</i> ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO - If YES, please explain: Owner and operator of the site. - If NO, you are not eligible for a permit for this source.			
9. Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): Hardwood flooring manufacturing plant		10. North American Industry Classification System (NAICS) code for the facility: 321918	
11A. DAQ Plant ID No. (for existing facilities only): 0 8 3 - 0 0 0 2 5		11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R30-08300025-2013; R13-1147P	

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A.

- For **Modifications, Administrative Updates or Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction or Relocation permits**, please provide directions to the *proposed new site location* from the nearest state road. Include a **MAP as Attachment B**.

From Charleston, take Interstate 79 North to exit 99. Proceed east on US Route 33 to Elkins, West Virginia. Take US Route 250 South from Elkins to Beverly. The facility is located on the right of and adjacent to US Route 250, approximately 1.6 miles south of Beverly in Randolph County.

12.B. New site address (if applicable):	12C. Nearest city or town: Beverly	12D. County: Randolph
12.E. UTM Northing (KM): 4296.88	12F. UTM Easting (KM): 597.41	12G. UTM Zone: 17

13. Briefly describe the proposed change(s) at the facility:
Rearrangement of process equipment and reallocation of air flows to each of the existing eight (8) baghouses for improved process efficiency. No physical changes to or impact on the control efficiency of the baghouses are expected.

14A. Provide the date of anticipated installation or change: 05/25/2015 - If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: / /	14B. Date of anticipated Start-Up if a permit is granted: 05/25/2015
--	---

14C. Provide a **Schedule** of the planned **Installation of/Change** to and **Start-Up** of each of the units proposed in this permit application as **Attachment C** (if more than one unit is involved).

15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:
Hours Per Day 24 Days Per Week 7 Weeks Per Year 52

16. Is demolition or physical renovation at an existing facility involved? YES NO

17. **Risk Management Plans.** If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your **Risk Management Plan (RMP)** to U. S. EPA Region III.

18. **Regulatory Discussion.** List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (*if known*). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (*if known*). Provide this information as **Attachment D**.

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

20. Include a **Table of Contents** as the first page of your application package.

21. Provide a **Plot Plan**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to **Plot Plan Guidance**) .
- Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F**.

23. Provide a **Process Description** as **Attachment G**.
- Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.

– For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

- | | | |
|--|--|---|
| <input type="checkbox"/> Bulk Liquid Transfer Operations | <input type="checkbox"/> Haul Road Emissions | <input type="checkbox"/> Quarry |
| <input type="checkbox"/> Chemical Processes | <input type="checkbox"/> Hot Mix Asphalt Plant | <input checked="" type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities |
| <input type="checkbox"/> Concrete Batch Plant | <input type="checkbox"/> Incinerator | <input type="checkbox"/> Storage Tanks |
| <input type="checkbox"/> Grey Iron and Steel Foundry | <input type="checkbox"/> Indirect Heat Exchanger | |
| <input checked="" type="checkbox"/> General Emission Unit, specify Hardwood Flooring & Finishing Lines | | |

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

- | | | |
|--|---|--|
| <input type="checkbox"/> Absorption Systems | <input checked="" type="checkbox"/> Baghouse | <input type="checkbox"/> Flare |
| <input type="checkbox"/> Adsorption Systems | <input type="checkbox"/> Condenser | <input type="checkbox"/> Mechanical Collector |
| <input type="checkbox"/> Afterburner | <input type="checkbox"/> Electrostatic Precipitator | <input type="checkbox"/> Wet Collecting System |
| <input type="checkbox"/> Other Collectors, specify | | |

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**.

➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and **Example Legal Advertisement** for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

YES NO

➤ If YES, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "**Precautionary Notice – Claims of Confidentiality**" guidance found in the **General Instructions** as **Attachment Q**.

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

- | | |
|--|---|
| <input type="checkbox"/> Authority of Corporation or Other Business Entity | <input type="checkbox"/> Authority of Partnership |
| <input type="checkbox"/> Authority of Governmental Agency | <input type="checkbox"/> Authority of Limited Partnership |

Submit completed and signed **Authority Form** as **Attachment R**.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. **Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned **Responsible Official** / **Authorized Representative**, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE _____

Darlo D. Pack

(Please use blue ink)

DATE: _____

3/10/2015

(Please use blue ink)

35B. Printed name of signee: Darlo D. Pack

35C. Title: Plant Manager

35D. E-mail: DDPack@armstrong.com

35E. Phone: 304-338-7629

35F. FAX: 304-642-7097

36A. Printed name of contact person (if different from above): Dennis J. Ruth

36B. Title: EHS Manager

36C. E-mail: DJRuth@armstrong.com

36D. Phone: 304-338-7619

36E. FAX: 304-338-4105

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate | <input type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet |
| <input type="checkbox"/> Attachment B: Map(s) | <input type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s) |
| <input checked="" type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input checked="" type="checkbox"/> Attachment D: Regulatory Discussion | <input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations |
| <input checked="" type="checkbox"/> Attachment E: Plot Plan | <input checked="" type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s) | <input type="checkbox"/> Attachment P: Public Notice |
| <input checked="" type="checkbox"/> Attachment G: Process Description | <input type="checkbox"/> Attachment Q: Business Confidential Claims |
| <input type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input type="checkbox"/> Attachment R: Authority Forms |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table | <input type="checkbox"/> Attachment S: Title V Permit Revision Information |
| <input type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input checked="" type="checkbox"/> Application Fee |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- Forward 1 copy of the application to the Title V Permitting Group and:
- For Title V Administrative Amendments:
 - NSR permit writer should notify Title V permit writer of draft permit,
- For Title V Minor Modifications:
 - Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,
 - NSR permit writer should notify Title V permit writer of draft permit.
- For Title V Significant Modifications processed in parallel with NSR Permit revision:
 - NSR permit writer should notify a Title V permit writer of draft permit,
 - Public notice should reference both 45CSR13 and Title V permits,
 - EPA has 45 day review period of a draft permit.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

ATTACHMENT A
CERTIFICATE OF BUSINESS REGISTRATION

**WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION
CERTIFICATE**

ISSUED TO:

ARMSTRONG HARDWOOD FLOORING COMPANY
DBA TIMBERLAND WOOD FLOORS
16803 DALLAS PKWY STE 200
ADDISON, TX 75001-5220

BUSINESS REGISTRATION ACCOUNT NUMBER: 1050-1395

This certificate is issued on: 07/17/2010

*This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 41, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

ATTACHMENT C
SCHEDULE OF PLANNED CHANGES

**Armstrong Hardwood Flooring Company - Beverly Plant
Administrative Update - March 2015**

Attachment C: Schedule of Planned Changes

*Phase 1 planned for May 23 through May 31, 2015. Startup of relocated equipment estimated for May 31, 2015.
Phase 2 planned for June 27 through July 5, 2015. Startup of relocated equipment estimated for July 5, 2015.*

EQUIPMENT	BAGHOUSE SYSTEM								PHASE
	2	3	5	7	8	8A			
RE-RIP SAW	move to							move from	2
ADJUSTABLE CAP 1-25" (BLAST GATE)	add on								2
SIDE MATCHER #2	add air bypass								anytime
CAPS CLOSED		open 1-12" (KS #6)							anytime after 5/1 (permit approval)
KNOT SAWS #6		move to						move from	anytime after 5/1
ADJUSTABLE CAP 1-14" (BLAST GATE)		modify							anytime after 5/1
SPLITTER #5 END PROFILES		add on							2
NEWMAN PREPLANER #1								relocate planer	1
NEWMAN PREPLANER #2								relocate planer	1
AUTOLOG CROSS CUT SAWS (SOUTH)									1
RIP SAW #5						move to		move from	1
RIP SAW #1	move from					move to, relo, upsized		move from	1
RIP SAW #6						swap RS #1 with RS #5 (idle)			2
RIP SAW #6						move to, relo, upsized		move from	1
STICK PLANER						move to		move from	between 1 and 2
SIDE MATCHER #1						add air bypass			anytime
AUTOLOG CROSS CUT SAWS (NORTH)									2
RIP SAW #2	move from							move to, relo, upsized	2
RIP SAW #4	move from							move to, relo, upsized	2
RIP SAW #3								relo, upsized	2
ADJUSTABLE CAP 1-12" (BLAST GATE)								add on	2
ADJUSTABLE CAP 1-15" (BLAST GATE)								add on	2
ADJUSTABLE CAP 1-24" (BLAST GATE)								add on	2
5/16 HOG									1
SIDE MATCHER #3						relo to Southeast, change fan/motor			
Spark Detection, Sprinkler						add air bypass			anytime
						remount			1

Armstrong Hardwood Flooring Company - Beverly Plant
Administrative Update - March 2015

Attachment C-1: Proposed Duct Sizing Changes

CURRENT		BAGHOUSE #2	
MACHINERY	DUCT SIZES	AREA SQ FT	AREA SQ FT
TNG END MATCHER #2	3-6" / 1-5" DIAMETER	0.725	0.725
GRV END MATCHER #2	2-6" DIAMETER	0.393	0.393
SIDE MATCHER #2	3-8 1/2-10" DIA.	2.138	2.138
KNOT SAWS #2	5-5" DIAMETER	0.682	0.682
SPLITTER #5	6-8" / 2-7" DIAMETER	2.629	2.629
SPLTR KNOT SAW #5 (REMOVED 1 KS)	4-5" DIAMETER	0.545	0.545
RIP SAW #2	1-4" / 1-8" / 1-10" DIA.	0.982	0.982
RIP SAW #4	1-4" / 1-8" / 1-10" DIA.	0.982	0.982
RIP SAW #1	1-4"	0.087	0.087
CONVEYOR	1-5" DIAMETER	0.136	0.136
CAPS CLOSED	1-15" 3-6" 2-9" 1-16"	0.000	0.000
	TOTAL AREA	9.299	9.299
	ACTUAL MAIN = 45"	11.045	11.045
MEASURED & PROVIDED		CALCULATED	
MEASURED AIR VELOCITY (FPM)	4200	39057	CFM
AREA OF CAN (SQ. FT)	177	221	Can Vel (FPM)
AREA OF CLOTH (SQ. FT.)	8,294	4.7	Air to Cloth

FUTURE		BAGHOUSE #2	
MACHINERY	DUCT SIZES	AREA SQ FT	AREA SQ FT
TNG END MATCHER #2	3-6" / 1-5" DIAMETER	0.725	0.725
GRV END MATCHER #2	2-6" DIAMETER	0.393	0.393
SIDE MATCHER #2	3-8 1/2-10" DIA.	2.138	2.138
KNOT SAWS #2	5-5" DIAMETER	0.682	0.682
SPLITTER #5	6-8" / 2-7" DIAMETER	2.629	2.629
SPLTR KNOT SAW #5 (REMOVED 1 KS)	4-5" DIAMETER	0.545	0.545
RE-RIP SAW	1-4" / 1-7"	0.355	0.355
CAP (OPENING ADJUSTABLE)	1-25" DIAMETER	3.409	3.409
CONVEYOR	1-5" DIAMETER	0.136	0.136
CAPS CLOSED	3-6" / 1-9" DIAMETER	0.000	0.000
	TOTAL AREA	11.012	11.012
	ACTUAL MAIN = 45"	11.045	11.045
MEASURED & PROVIDED		CALCULATED	
DESIGN CAPACITY AIR VELOCITY (FPM)	4561	50224	CFM
AREA OF CAN (SQ. FT)	177	284	Can Vel (FPM)
AREA OF CLOTH (SQ. FT.)	8,294	6.1	Air to Cloth

**Armstrong Hardwood Flooring Company - Beverly Plant
Administrative Update - March 2015**

Attachment C-1: Proposed Duct Sizing Changes

CURRENT			
BAGHOUSE #3			
MACHINERY	DUCT SIZES	AREA SQ FT	AREA SQ FT
TEM #5	3-6" DIAMETER	0.589	0.589
GEM #5	2-6" DIAMETER	0.393	0.393
SIDE MATCHER #5	9-8" / 1-6" DIAMETER	3.338	3.338
KNOT SAW #5	3-5" DIAMETER	0.409	0.409
TEM #6	3-6" DIAMETER	0.589	0.589
GEM #6	2-6" DIAMETER	0.393	0.393
SIDE MATCHER #6	2-6" / 3-8" / 1-9" / 1-10" DIA	2.427	2.427
CAPS CLOSED	2-12" 1-14" 2-9" DIA	0.000	0.000
	TOTAL AREA	8.138	8.138
	ACTUAL MAIN = 44"	10.559	10.559
		CALCULATED	CFM
MEASURED & PROVIDED		35700	CFM
MEASURED AIR VELOCITY (FPM)		4387	CFM
AREA OF CAN (SQ. FT)		202	Can Vel (FPM)
		177	
AREA OF CLOTH (SQ. FT.)		4.30	Air to Cloth
		8,294	

FUTURE			
BAGHOUSE #3			
MACHINERY	DUCT SIZES	AREA SQ FT	AREA SQ FT
TEM #5	3-6" DIAMETER	0.589	0.589
GEM #5	2-6" DIAMETER	0.393	0.393
SIDE MATCHER #5	9-8" / 1-6" DIAMETER	3.338	3.338
KNOT SAW #5	3-5" DIAMETER	0.409	0.409
TEM #6	3-6" DIAMETER	0.589	0.589
GEM #6	2-6" DIAMETER	0.393	0.393
SIDE MATCHER #6	2-6" / 3-8" / 1-9" / 1-10" DIA	2.427	2.427
CAPS CLOSED	1-12" / 2-9" DIAMETER	0.000	0.000
SPLITTER #5 END PROFILES	2-6" DIAMETER	0.393	0.393
CAP (OPENING ADJUSTABLE)	1-14" DIAMETER	1.069	1.069
KNOT SAWS #6	5-5" DIAMETER	0.682	0.682
	TOTAL AREA	10.281	10.281
	ACTUAL MAIN = 44"	10.559	10.559
		CALCULATED	CFM
MEASURED & PROVIDED		50851	CFM
DESIGN CAPACITY AIR VELOCITY (FPM)		4946	CFM
AREA OF CAN (SQ. FT)		177	Can Vel (FPM)
		8,294	
AREA OF CLOTH (SQ. FT.)		6.13	Air to Cloth
		287	

CURRENT			
BAGHOUSE #6			
MACHINERY	DUCT SIZES	AREA SQ FT	AREA SQ FT
TEM #3	2-5" / 1-6" DIAMETER	0.469	0.469
GEM #3	2-5" DIAMETER	0.273	0.273
SIDE MATCHER #3	3-6" 1-8" 1-10" DIA	1.484	1.484
KNOT SAWS #3	5-5" DIAMETER	0.682	0.682
RANDOMAT	4-5" DIAMETER	0.545	0.545
PUMA	32" DIAMETER MAIN	5.585	5.585
	TOTAL AREA	9.038	9.038
	ACTUAL MAIN = 42"	9.621	9.621
		CALCULATED	CFM
MEASURED & PROVIDED		39648	CFM
MEASURED AIR VELOCITY (FPM)		4387	CFM
Add on 5/16 Wood Hog Cyclone #4 (CFM)		4398	CFM
AREA OF CAN (SQ. FT)		286	Can Vel (FPM)
		154	
AREA OF CLOTH (SQ. FT.)		6.4	Air to Cloth
		6,887	

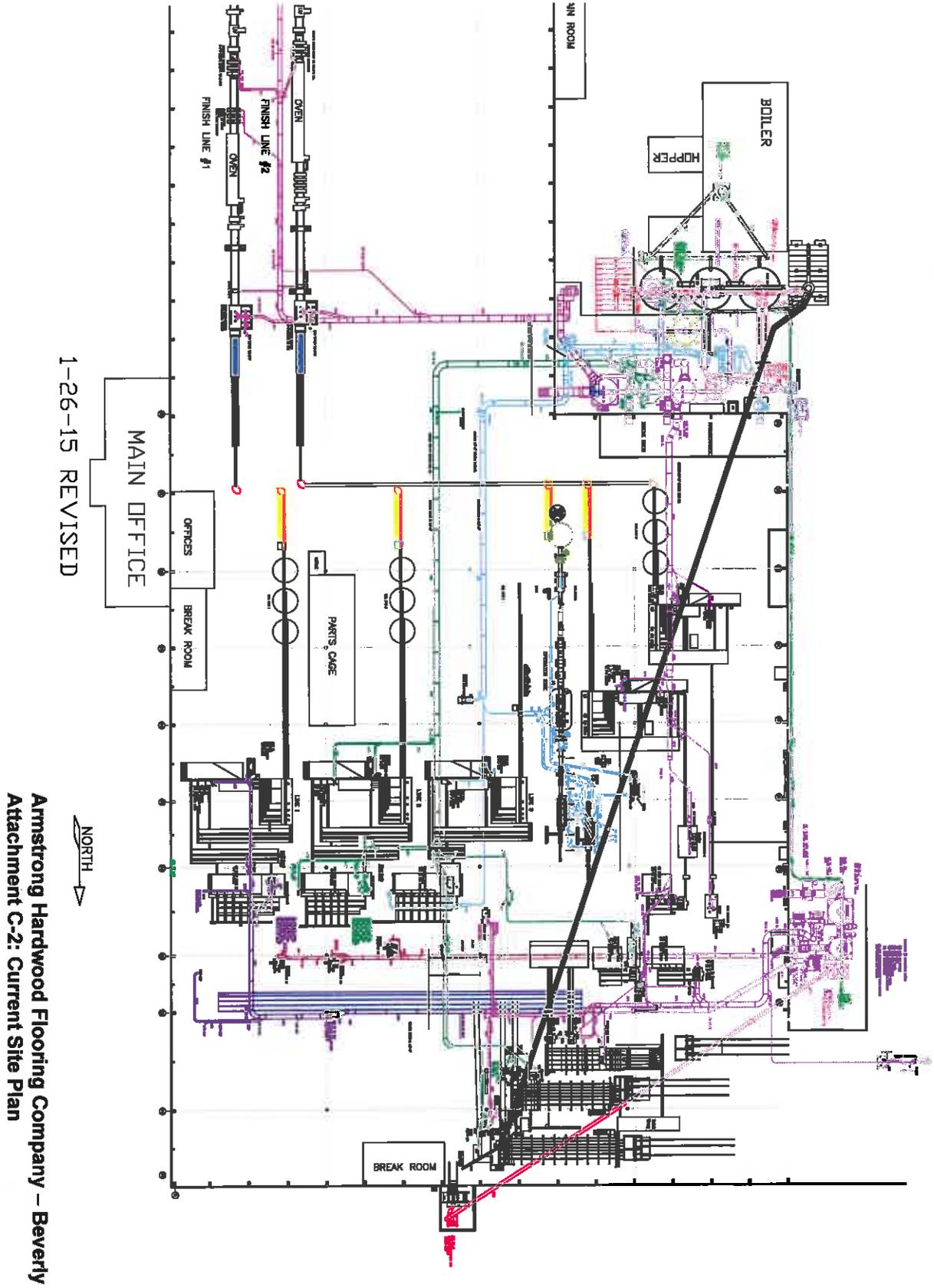
FUTURE			
BAGHOUSE #6			
MACHINERY	DUCT SIZES	AREA SQ FT	AREA SQ FT
TEM #3	2-5" / 1-6" DIAMETER	0.469	0.469
GEM #3	2-5" DIAMETER	0.273	0.273
SIDE MATCHER #3	3-6" 1-8" 1-10" DIA	1.484	1.484
KNOT SAWS #3	5-5" DIAMETER	0.682	0.682
RANDOMAT	4-5" DIAMETER	0.545	0.545
PUMA	32" DIAMETER MAIN	5.585	5.585
	TOTAL AREA	9.038	9.038
	ACTUAL MAIN = 42"	9.621	9.621
		CALCULATED	CFM
MEASURED & PROVIDED		39648	CFM
MEASURED AIR VELOCITY (FPM)		4387	CFM
Add on 5/16 Wood Hog Cyclone #4 (CFM)		4398	CFM
AREA OF CAN (SQ. FT)		286	Can Vel (FPM)
		154	
AREA OF CLOTH (SQ. FT.)		6.4	Air to Cloth
		6,887	

**Armstrong Hardwood Flooring Company - Beverly Plant
Administrative Update - March 2015**

Attachment C-1: Proposed Duct Sizing Changes

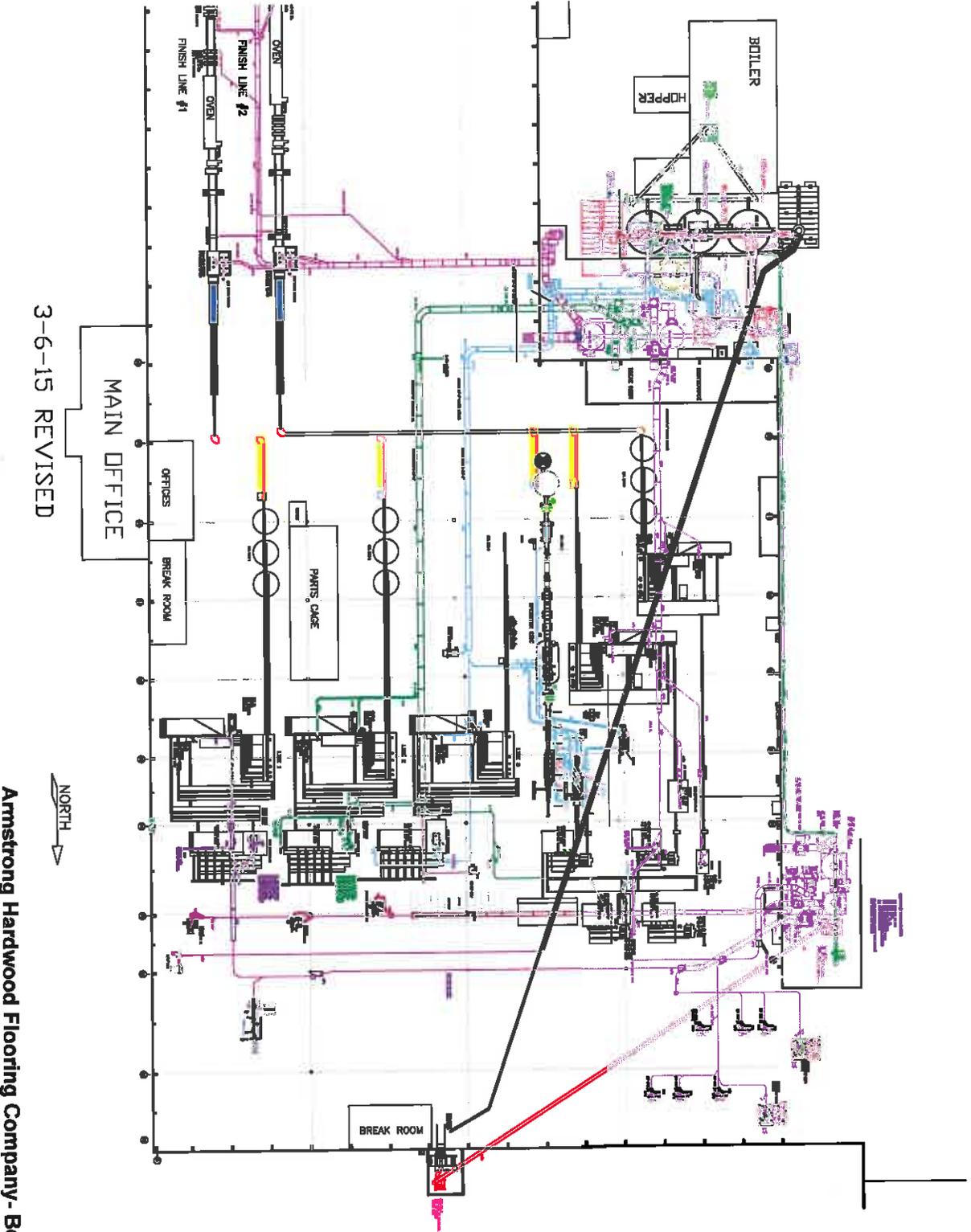
CURRENT			
BAGHOUSE #8			
FAN 8			
MACHINERY	PIPE SIZE	AREA SQ FT	AREA SQ FT
NEWMAN PREPLANER #1	1-11/16-12" DIAMETER	1.445	1.445
NEWMAN PREPLANER #2	1-11/16-12" DIAMETER	1.445	1.445
NEWMAN PREPLANER #3	1-11/16-12" DIAMETER	1.445	1.445
CAP CLOSED	1-7" DIAMETER	0.000	0.000
TOTAL AREA		4.336	4.336
ACTUAL MAIN = 29"		4.587	4.587
FAN 8A			
MACHINERY	PIPE SIZE	AREA SQ FT	AREA SQ FT
CAP CLOSED (Removed SPLITTER #6)	1-24" DIAMETER	0.000	0.000
KNOT SAWS #6	5-5" DIAMETER	0.682	0.682
RIP SAW #5	2-8" DIAMETER	0.698	0.698
AUTOLOG CROSS CUT SAWS	2-6/3-4" DIAMETER	0.654	0.654
CAP	1-12" DIAMETER	0.785	0.785
STICK PLANER	1-4/3-6"	0.876	0.876
RIP SAW #1	1-7/1-10"	0.813	0.813
RIP SAW #3	1-8/1-10/1-4" DIA.	0.962	0.962
RE-RIP SAW	1-4/1-7" DIAMETER	0.355	0.355
RIP SAW #6	1-8" / 1-10" DIAMETER	0.894	0.894
TOTAL AREA		6.540	6.540
ACTUAL MAIN = 41"		9.168	9.168
MEASURED & PROVIDED			
FAN 8 DESIGN CAPACITY AIR VEL (FPM)	20544	CFM	CFM
FAN 8A DESIGN CAPACITY AIR VEL (FPM)	21907	CFM	CFM
TOTAL AIR VOLUME FOR BAGHOUSE	42452	CFM	CFM
AREA OF CAN (SQ. FT)	198	Can Vel (FPM)	Can Vel (FPM)
214			
AREA OF CLOTH (SQ. FT.)	4.2	Air to Cloth	Air to Cloth
10,150			
Notes for BH #8:			
1. FAN 8A SUFFOCATING, IMPROVE IN FUTURE STATE			

FUTURE			
BAGHOUSE #8			
FAN 8			
MACHINERY	PIPE SIZE	AREA SQ FT	AREA SQ FT
NEWMAN PREPLANER #1 (RELOCATED)	1-11/16-12" DIAMETER	1.445	1.445
NEWMAN PREPLANER #2 (RELOCATED)	1-11/16-12" DIAMETER	1.445	1.445
NEWMAN PREPLANER #3	1-11/16-12" DIAMETER	1.445	1.445
CAP CLOSED	1-7" DIAMETER	0.000	0.000
TOTAL AREA		4.336	4.336
ACTUAL MAIN = 29"		4.587	4.587
FAN 8A			
MACHINERY	PIPE SIZE	AREA SQ FT	AREA SQ FT
AUTOLOG CROSS CUT SAWS (NORTH)	2-6/3-4" DIAMETER	0.654	0.654
RIP SAW #2	1-8/1-11" DIAMETER	1.102	1.102
RIP SAW #4	1-9/1-11" DIAMETER	1.102	1.102
CAP (OPENING ADJUSTABLE)	1-15" DIAMETER	1.227	1.227
CAP (OPENING ADJUSTABLE)	1-24" DIAMETER	3.142	3.142
CAP (OPENING ADJUSTABLE)	1-12" DIAMETER	0.785	0.785
RIP SAW #3	1-9/1-11" DIAMETER	1.102	1.102
TOTAL AREA		9.114	9.114
ACTUAL MAIN = 41"		9.168	9.168
MEASURED & PROVIDED			
FAN 8 DESIGN CAPACITY AIR VEL (FPM)	21624	CFM	CFM
4987			
FAN 8A DESIGN CAPACITY AIR VEL (FPM)	45450	CFM	CFM
4987			
TOTAL AIR VOLUME FOR BAGHOUSE	67074	CFM	CFM
AREA OF CAN (SQ. FT)	313	Can Vel (FPM)	Can Vel (FPM)
214			
AREA OF CLOTH (SQ. FT.)	6.6	Air to Cloth	Air to Cloth
10,150			
Notes for BH #8:			



1-26-15 REVISED

**Armstrong Hardwood Flooring Company – Beverly Plant
Attachment C-2: Current Site Plan**



3-6-15 REVISED



**Armstrong Hardwood Flooring Company - Beverly Plant
Attachment C-3: Future Site Plan**

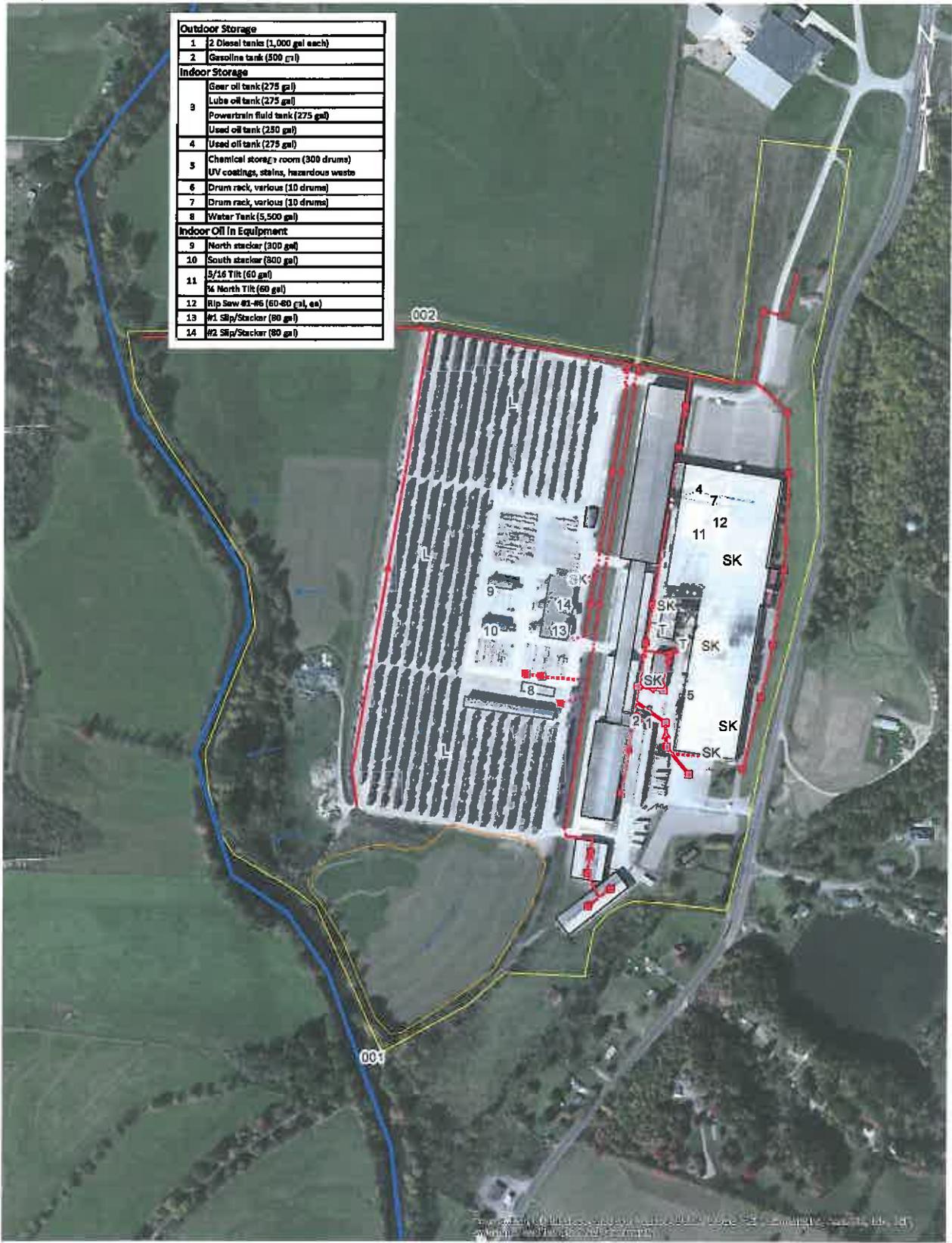
**ATTACHMENT D
REGULATORY DISCUSSION & APPLICABILITY
REVIEW**

ATTACHMENT D: REGULATORY DISCUSSION AND APPLICABILITY REVIEW

For the purposes of this application, the pollutants of concern were PM and PM₁₀. The proposed project includes the relocation of Flooring Mill equipment to improve process efficiency. To accommodate those changes, ductwork and air flows are being adjusted and rebalanced. These changes will impact the inlet air flow rates to Baghouse Nos. 2, 3, 7, and 8. No physical changes will take place for either the cyclones or baghouses which control PM and PM₁₀ emissions from the affected equipment. Therefore, no changes result in potential emissions from the Flooring Mill. No state or federal regulations will be triggered by this change and no new standards will apply to the Flooring Mill processes.

ATTACHMENT E
PLOT PLAN

Outdoor Storage	
1	2 Diesel tanks (1,000 gal each)
2	Gasoline tank (500 gal)
Indoor Storage	
	Gear oil tank (275 gal)
9	Lube oil tank (275 gal)
	Powertrain fluid tank (275 gal)
	Used oil tank (250 gal)
4	Used oil tank (275 gal)
3	Chemical storage room (300 drums)
	UV coatings, stains, hazardous waste
6	Drum rack, various (10 drums)
7	Drum rack, various (10 drums)
8	Water Tank (5,500 gal)
Indoor Oil in Equipment	
9	North stacker (300 gal)
10	South stacker (800 gal)
11	5/16 TIR (60 gal)
	16 North Tilt (60 gal)
12	Rip Saw #1-#6 (60-80 gal, ea)
13	#1 Slip/Stacker (80 gal)
14	#2 Slip/Stacker (80 gal)



Legend

- Tygart River
- Storm Water Flow Direction
- Property Boundary
- Outlet 001 Drainage Area (remaining property drains to Outlet 002)
- Storm Water Culvert/Ditch
- Underground Storm Water Culvert
- Drop Inlet
- Building

- 001 Outlet
- T Transformer
- SK Spill Kit
- L Lumberyard

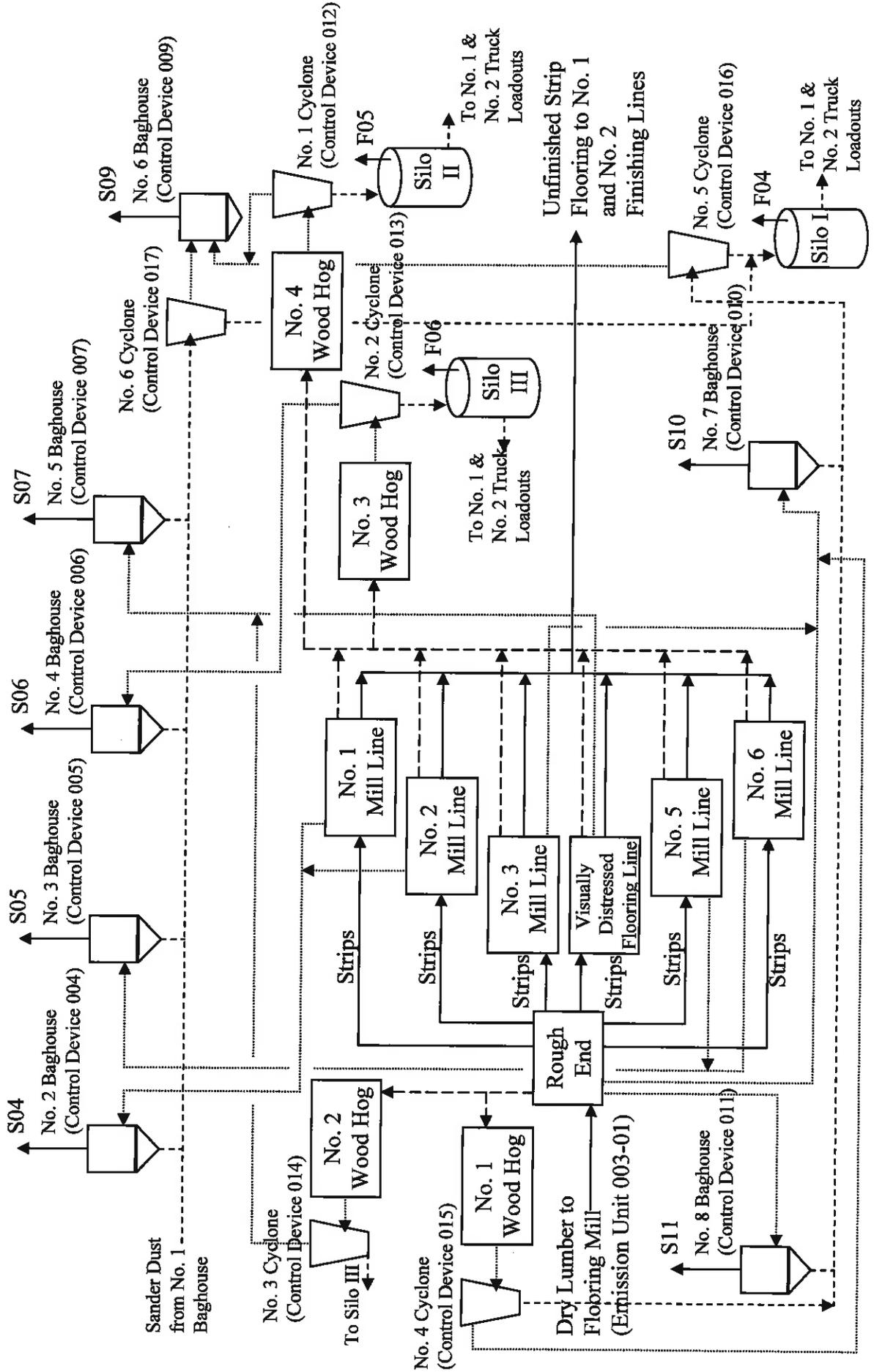
Attachment E - Site Plan
Armstrong Hardwood Flooring
Beverly, West Virginia

EPS

Note: Loading and unloading throughout the facility

**ATTACHMENT F
PROCESS FLOW DIAGRAM**

Attachment F: Process Flow Diagram for Flooring Mill



ATTACHMENT G
PROCESS DESCRIPTION

ATTACHMENT G: PROCESS DESCRIPTION

Overall Facility Process Description:

Green lumber is purchased and stacked in the Mill Yard to facilitate air drying of the lumber. The lumber is then further dried in the steam heated pre-dryer and/or one of 38 lumber kilns. Kiln-dried lumber is transferred by one of three lumber tilts to the Mill rough end saws. The rough end saws cut the lumber into strips for transfer to one of six lines of knot saws, side matchers, and end matchers. The unfinished wood flooring is graded, stacked and either stored or transferred to one of two finishing lines. Finished hardwood flooring is graded and packaged for shipment to mill customers. Two wood-fired boilers provide heat and steam to the plant.

Flooring Mill:

The Flooring Mill consists of six (6) lines where cutting, planing, and edging operations are performed to convert kiln-dried hardwood lumber into unfinished hardwood flooring. The kiln-dried lumber is fed to the rough end for preliminary sorting, cutting, and sizing and then to one of the six processing lines. The Flooring Mill also includes several hogs, three hogged fuel silos, and two truck loadouts for hogged fuel.

The enclosed application is for the rearrangement of process equipment and reallocation of air flows to each of the existing eight (8) baghouses for improved process efficiency. No physical changes to or impact on the control efficiency of the baghouses are expected.

ATTACHMENT I
EMISSION UNITS TABLE

ATTACHMENT N
SUPPORTING EMISSIONS CALCULATIONS

**Armstrong Hardwood Flooring Company - Beverly Plant
Administrative Update - March 2015**

Attachment N: Emissions Calculations - Affected Baghouses Only

Emission Point ID	Emission Unit Description	Design Capacity ACFM	Current ACFM	Emission Factor (gr/cf)	Hours of Operation Per Year	Current Max Actual Emissions			Potential Emissions & Proposed Permit Limits				Current Permit Limit	
						PM Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)	PM Emissions (tons/yr)	PM Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)	PM Emissions (tons/yr)	PM ₁₀ Emissions (tons/yr)	PM Emissions (tons/yr)	PM ₁₀ Emissions (tons/yr)
S04	No. 2 Baghouse	50,373	39,057	0.005	8760	1.67	0.33	7.33	1.47	0.43	9.46	1.89	10.38	2.08
S05	No. 3 Baghouse	52,227	35,700	0.005	8760	1.53	0.31	6.70	1.34	0.45	9.80	1.96	10.38	2.08
S10	No. 7 Baghouse	52,990	31,462	0.005	8760	1.35	0.27	5.91	1.18	0.45	9.95	1.99	9.95	1.99
S11	No. 8 Baghouse	68,597	42,452	0.005	8760	1.82	0.36	7.97	1.59	0.59	12.88	2.58	12.88	2.58

Emission Point ID	Baghouse	Design Capacity ACFM	Future ACFM	Emission Factor (gr/cf)	Hours of Operation Per Year	Future Max Actual Emissions			Potential Emissions & Proposed Permit Limits				Current Permit Limit	
						PM Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)	PM Emissions (tons/yr)	PM Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)	PM Emissions (tons/yr)	PM ₁₀ Emissions (tons/yr)	PM Emissions (tons/yr)	PM ₁₀ Emissions (tons/yr)
S04	No. 2 Baghouse	50,373	50,224	0.005	8760	2.15	0.43	9.43	1.89	0.43	9.46	1.89	10.38	2.08
S05	No. 3 Baghouse	52,227	50,851	0.005	8760	2.18	0.44	9.55	1.91	0.45	9.80	1.96	10.38	2.08
S10	No. 7 Baghouse	52,990	52,535	0.005	8760	2.25	0.45	9.88	1.97	0.45	9.95	1.99	9.95	1.99
S11	No. 8 Baghouse	68,597	67,074	0.005	8760	2.87	0.57	12.59	2.52	0.59	12.88	2.58	12.88	2.58

Notes:

1. Emission Factor based on using dry wood dust in 99.9% Efficient Donaldson Duralife Bags is 0.005 grains/cf
2. PM10 calculated at 20% of total PM emissions
3. Emission Rate (lbs/hr) = Emission Factor (gr/cf) x Air Flow (cfm) x 60 min/hr / 7,000 (grains/lb)
4. Emission Rate (tons/yr) = Emission Factor (gr/cf) x Air Flow (cfm) x 8760 hrs/yr / 7,000 gr/lb / 2,000 lb/ton

**Armstrong Hardwood Flooring Company - Beverly Plant
Administrative Update - March 2015**

Attachment N-1: Emissions Calculations - Potential Emissions for All Baghouses

Emission Point ID	Emission Unit Description	Design Capacity ACFM	Current ACFM	Emission Factor (gr/cf)	Hours of Operation Per Year	Current Max Actual Emissions			Potential Emissions & Proposed Permit Limits					Current Permit Limit	
						PM Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)	PM Emissions (tons/yr)	PM Emissions (lbs/hr)	PM Emissions (tons/yr)	PM Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)	PM Emissions (tons/yr)	PM ₁₀ Emissions (tons/yr)	PM Emissions (tons/yr)
S03	No. 1 Baghouse	79,556	64,442	0.005	8760	2.76	0.55	12.10	3.41	14.93	0.68	2.99	10.38	2.08	
S04	No. 2 Baghouse	50,373	39,057	0.005	8760	1.67	0.33	7.33	2.16	9.46	0.43	1.89	10.38	2.08	
S05	No. 3 Baghouse	52,227	35,700	0.005	8760	1.53	0.31	6.70	2.24	9.80	0.45	1.96	10.38	2.08	
S06	No. 4 Baghouse	27,489	25,525	0.005	8760	1.09	0.22	4.79	1.18	5.16	0.24	1.03	10.38	2.08	
S07	No. 5 Baghouse	44,628	44,046	0.005	8760	1.89	0.38	8.27	1.91	8.38	0.38	1.68	16.96	3.40	
S08	No. 6 Baghouse	59,748	56,610	0.005	8760	2.43	0.49	10.63	2.56	11.22	0.51	2.24	11.30	2.30	
S10	No. 7 Baghouse	52,990	31,452	0.005	8760	1.35	0.27	5.91	2.27	9.95	0.45	1.99	9.95	1.99	
S11	No. 8 Baghouse	68,597	42,452	0.005	8760	1.82	0.36	7.97	2.94	12.88	0.59	2.58	12.88	2.58	

Emission Point ID	Baghouse	Design Capacity ACFM	Future ACFM	Emission Factor (gr/cf)	Hours of Operation Per Year	Future Max Actual Emissions			Potential Emissions & Proposed Permit Limits					Current Permit Limit	
						PM Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)	PM Emissions (tons/yr)	PM Emissions (lbs/hr)	PM Emissions (tons/yr)	PM Emissions (lbs/hr)	PM ₁₀ Emissions (lbs/hr)	PM Emissions (tons/yr)	PM ₁₀ Emissions (tons/yr)	PM Emissions (tons/yr)
S03	No. 1 Baghouse	79,556	64,442	0.005	8760	2.76	0.55	12.10	3.41	14.93	0.68	2.99	10.38	2.08	
S04	No. 2 Baghouse	50,373	50,224	0.005	8760	2.15	0.43	9.43	2.16	9.46	0.43	1.89	10.38	2.08	
S05	No. 3 Baghouse	52,227	50,851	0.005	8760	2.18	0.44	9.55	2.24	9.80	0.45	1.96	10.38	2.08	
S06	No. 4 Baghouse	27,489	25,525	0.005	8760	1.09	0.22	4.79	1.18	5.16	0.24	1.03	10.38	2.08	
S07	No. 5 Baghouse	44,628	44,046	0.005	8760	1.89	0.38	8.27	1.91	8.38	0.38	1.68	16.96	3.40	
S08	No. 6 Baghouse	59,748	56,610	0.005	8760	2.43	0.49	10.63	2.56	11.22	0.51	2.24	11.30	2.30	
S10	No. 7 Baghouse	52,990	52,535	0.005	8760	2.25	0.45	9.86	2.27	9.95	0.45	1.99	9.95	1.99	
S11	No. 8 Baghouse	68,597	67,074	0.005	8760	2.87	0.57	12.59	2.94	12.88	0.59	2.58	12.88	2.58	

Notes:

1. Emission Factor based on using dry wood dust in 99.9% Efficient Donaldson DuraLife Bags is 0.005 grains/cf
2. PM10 calculated at 20% of total PM emissions
3. Emission Rate (lbs/hr) = Emission Factor (gr/cf) x Air Flow (cfm) x 60 min/hr / 7,000 (grains/lb)
4. Emission Rate (tons/yr) = Emission Factor (gr/cf) x Air Flow (cfm) x 60 min/hr x 8760 hrs/yr / 7,000 gr/lb / 2,000 lb/ton

ATTACHMENT O
MONITORING, RECORDKEEPING, REPORTING, AND
TESTING PLANS

ATTACHMENT O: MONITORING, TESTING, RECORDKEEPING PLAN

Applicable Monitoring Requirements:

Weekly Method 22 visible emissions checks will be conducted for emission points S3, S4, S5, S6, S7, S9, S10, S11 during normal operations and appropriate weather conditions. If visible emissions are observed, an opacity reading using the procedures from 45CSR7A will be conducted as soon as practicable, but no more than 72 hours from the observed visible emissions.

Each cyclone, baghouse, and exhaust system will be operated and maintained in accordance with manufacturer's specification to ensure 99.9% control efficiency. Operational practices include replacement of broken bags, proper fan operations, prompt replace of fans and duct work, daily inspections, and daily monitoring of pressure drop across each baghouse. The normal operating pressure drop range for each baghouse is 0.2 to 0.65 inches of water.

Testing Requirements:

The Director may require testing or conduct testing to determine compliance.

Applicable Recordkeeping Requirements:

The following records will be maintained on file for a minimum of five years:

- Records of visible emission monitoring data and opacity evaluations will be maintained on file.
- Records of monitoring data involved with proper operation, daily inspections, and pressure drop readings
- Records of regular preventative maintenance conducted on the baghouse in accordance with manufacturer's specifications
- Description of any malfunctions of any baghouse including, start time, duration, cause, and corrective action

Reporting Requirements:

Any violations of the allowable visible emissions requirements for any baghouse will be reported in writing within 10 calendar days of the occurrence and will include the results of the visible emissions determination, the cause, and any corrective measures taken or planned.