

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0698-AR-26 AFIN: 50-00006

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Firestone Building Products Company, LLC
1406 Highway 371 North Drive
Prescott, Arkansas 71857

3. PERMIT WRITER:

Derrick Brown

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Rubber Product Manufacturing for Mechanical Use
NAICS Code: 326291

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
11/25/2019	De Minimis	Replace Boiler #2 (SN-16B) with Boiler #4 (SN-16C); rename temporary package boiler (SN-16T) to Boiler #3; with this application Firestone has stated they have purchased the temporary boiler.

6. REVIEWER'S NOTES:

Firestone Building Products Company owns and operates a rubber roofing manufacturing facility located in Prescott, Arkansas. This modification permits operation of a new natural gas fired boiler (Boiler #4), and renames temporary package boiler (SN-16T) to

Boiler #3; with this application Firestone has stated they have purchased the temporary boiler. This modification decreases permitted emissions by 0.6 tpy of PM₁₀, 0.1 tpy of SO₂, 7.2 tpy of CO, 4.3 tpy of NO_x, and increases permitted emissions of PM by 0.2 tpy.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

The facility has not been inspected since April 13, 2017. This inspection was outlined in the statement of basis for Permit #: 0698-AR-25 (the facility's last permit).

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N
If yes, were GHG emission increases significant? N/A

b) Is the facility categorized as a major source for PSD? N

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-503 & SN-504	There are no specific emission limits or pollutants identified, but the rules generally regulate HAPs	40 C.F.R. § 63, Subpart ZZZZ
SN-505 & SN-506	There are no specific emission limits or pollutants identified, but the rules generally regulate Criteria pollutants	40 C.F.R. § 60, Subpart IIII
SN-16T, SN-16C	(N/A), natural gas fired, only monthly recordkeeping applies.	40 C.F.R. § 60, Subpart Dc

10. PERMIT SHIELD – TITLE V PERMITS ONLY: N/A (Minor Source Permit)

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

c) H₂S Modeling: N/A

13. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
All PM Sources	Testing	Varies	None		PM/PM ₁₀ emissions from all particulate sources are based on testing data from the facility submitted on March 2, 1995 or based on process knowledge.
03, 103, & 104	Testing	lb/lb rubber: 4.2E-04 VOC lb/hr Total HAP: 0.63 (SN-03) 0.29 (SN-103) 0.35 (SN-104)	None		VOC and HAP emission factors are based on stack testing conducted in October 2011 plus a 25% safety factor.
13, 14, 114, 202, 206, 207, 312, 313, 323A, 323B, 330	Source Specific Emission Factors	Varies			VOC and HAP emission factors are based on stack testing conducted in October 2011.
301A, 304, 304A	Source specific emission factor	lb/lb: 6.87E-06 PM/PM ₁₀			Maximum annual capacity of 99,338,400 pounds
08A – 08G	Source Specific Emission	lb/lb rubber: 5.62E-05 VOC	--	--	VOC and HAP emission factors are based on stack testing conducted in October 2011 plus a

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	Factors	lb/hr Total HAP: 0.014 (A - F) 0.005 (G)			25% safety factor.
16T & 16C	AP-42: 1.4	lb/MMSCF: 7.6 PM/PM ₁₀ 0.6 SO ₂ 5.5 VOC 84 CO ^{16C} 50 NO _x ^{16T} 50 NO _x	--	--	
315	Mass Balance	lb/gal 2.1 VOC No HAPs	--	--	Stack testing for primers in excess of 2.1 lb VOC/gal
316	Mass Balance	lb/gal 1.87 VOC 1.87 Toluene			Automated and Manual rolling operations
317	Source Specific Emission Factors	Varies	--	--	VOC and HAP emission factors are based on stack testing conducted for SN-203 in October 2011.
500, 501	Mass Balance		None		Mass Balance assuming 100% of VOC in raw materials is emitted to atmosphere
502	Source Specific Emission Factor	0.58 lb PM/PM ₁₀ Per mandrel cleaned	--	--	--
503 - 506	AP-42, Table 3.3-1	lb/hp-hr: 2.2E-03 PM 2.05E-03 SO ₂ 2.47E-03 VOC 6.68E-03 CO 0.031 NO _x	--	--	Emergency diesel fire pump, emergency generator, and two (2) diesel operated air compressors
700	Source Specific Emission	lb/lb rubber: 6.50E-05 PM 1.50E-03	--	--	A single test was conducted on September 26, 2013. Maximum throughput is 3,000

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	Factors	VOC			pounds of EPDM per hour and 15,600,000 pounds per year

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
03, 08A – 08G	VOC HAPs	Bench scale equivalent to approved test methods	Once every 60 months.	To verify site specific values.
03	VOC	25A	Once every 60 months. The last testing was conducted in October 2016.	
03	HAPs	SW-846 Method 0031 (modified), and/or EPA TO-15 (modified)	Once every 60 months. The last testing was conducted in October 2016.	To verify site specific values.
08A – 08G	VOC HAPs	25A EPA TO-15	Once every 60 months. The last testing was conducted in October 2011.	
700	VOC	25A	Once every 60 months thereafter. The last testing was conducted in August 2014.	

15. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
N/A				

16. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
MSDS	Kept on site and updated annually	Continuously	No	
16T & 16C	Boiler fuel	Natural gas only	Continuously	No
16T	Boiler fuel combusted	None	Monthly	No
03, 103, 104	VOC emission factor	4.20E-04 lb VOC/lb rubber	Monthly	No
08A – 08G		5.620E-05 lb VOC/lb rubber	Monthly	No
301A, 304, & 304A	Carbon black unloading	99,338,400 pounds per consecutive 12-month	Monthly	No
Plantwide	VOC emissions	95 tons per rolling 12-month period	Monthly	No
	VOC emission factors and monthly throughput	See Specific Condition 13		
500	Cold Cleaning Solvent VOC Content	8.9 lb/gal No HAPs	Monthly	No
501	Inks and Cleaners VOC Content	8.0 lb/gal No HAPs	Monthly	No
315	Seam Tape Primer Machine Primer Formulation Limits	2.1 lb/gal (VOC content) or not to exceed 6.3 lb/hr No HAPs	Monthly	No
316	Primer Pre-Tape Formulation Limit	1.96 lb/gal VOC 1.87 lb/gal Toluene	Monthly	No
503 - 506	Hours of operation (each)	500 hours per calendar year	Monthly	No

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
503 - 506	Hours of operation	Anything in excess of 100 hours per calendar year must demonstrate that the engine still qualifies as an emergency engine as outlined in §60.4211(f)	Monthly	No

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
13, 206, 207, 323A, 323B, 503 - 506, 700	20%	Department Guidance	Observation
01A, 01B, 02A, 02B, 03, 07, 16T, 16B, 17A, 17B, 18A, 18B, 101A, 101B, 102 - 104, 107, 116, 118, 120, 201, 202, 205, 301A, 302, 303, 304, 304A, 305 - 308, 309A, 309B, 310 - 312, 317, 318, 502	5%	Department Guidance	Observation

18. DELETED CONDITIONS:

Former SC	Justification for removal
	None removed this permit.

19. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Cat.	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Devulcanization paraffinic oil storage tank (10,000 gallon tank)	3			0.0038			0.0038	0.0038
Seam Tape Testing Lab Vent	5			0.19			0.095	0.19
Laboratory Oven Vent	5	0.0005		0.14			0.07	0.07
Curing Cooling Tower	13	0.71						
Chiller Cooling Tower	13	0.75						
Process Cooling Tower	13	0.44						
Cooling Tower for Mixtruder	13	0.44						
Day Tanks for SN-317	13			1.09E-4			1.09E-4	1.09E-4
Comerio Line Shredder	13	0.1		0.1			0.06	0.11
Bark & Horz. Hog	13	1.05						
Slab Dip/Soap Tanks	13	1.05						

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
0698-AR-25

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

