

STATEMENT OF BASIS

For the issuance of Air Permit # 0698-AR-28 AFIN: 50-00006

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Holcim Solutions and Products US, LLC
1406 Highway 371 North Drive
Prescott, Arkansas 71857

3. PERMIT WRITER:

Sterling Powers

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, De Minimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
7/21/2022	De Minimis	Add Boilers #5, 6 Remove Boilers #1, #4 Add Autoclave #8 Remove Autoclave #1

6. REVIEWER'S NOTES:

Firestone Building Products Company owns and operates a rubber roofing manufacturing facility located in Prescott, Arkansas. This De Minimis modification removes the Temporary Package Boiler #1 (SN-16T) and Boiler #4 (SN-16C), adds Boiler #5 (SN-16D) and Boiler #6 (SN-16E), removes Autoclave #1 (SN-08A), adds Autoclave #8 (SN-08H), revises any relevant special conditions, updates process descriptions, and clarifies the autoclave emission verification method

and schedule. Permitted emissions are decreased by 2.3 tpy PM₁₀, 0.1 tpy SO₂, 26.5 tpy CO, 15.9 tpy NO_x, 2.3 tpy PM and 0.6 tpy Total HAPs.

7. COMPLIANCE STATUS:

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

This facility was last inspected on November 19, 2019 and was found to be in compliance. EPA ECHO shows “No Violation Identified” for Clean Air Act compliance.

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

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-16D, SN-16E	(N/A), natural gas fired, only monthly recordkeeping applies.	40 C.F.R. § 60 Subpart Dc

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
N/A				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N

(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Rule 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit? N
If not, explain why.

For any requested inapplicable regulation in the permit shield, explain the reason why it is not applicable in the table below.

Source	Inapplicable Regulation	Reason
N/A		

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
N/A		

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. 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 DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

Based on Department procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

The non-criteria pollutants listed below were evaluated. Based on Department procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Allyl Chloride	3.12	0.344	0.01	Yes
Hexane	176	19.3	1.44	Yes
Methanol	262	28.8	0.24	Yes
Methylene Chloride	173	19.1	0.67	Yes
Toluene	75.3	8.28	2.17	Yes
Beryllium	0.00005	5.50E-06	2.00E-06	Yes
Chromium	0.01	1.10E-03	4.00E-04	Yes

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards Y

If exempt, explain: No H₂S emissions

15. 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
08B – 08H	Source Specific Emission Factors	lb/lb rubber: 5.62E-05 VOC lb/hr Total HAP: 0.014 (B- F) 0.005 (G) 0.014 (H)	--	--	VOC and HAP emission factors are based on stack testing conducted in October 2011 plus a 25% safety factor.
16D & 16E	AP-42: 1.4	lb/MMSCF: 7.6 PM/PM ₁₀ 0.6 SO ₂ 5.5 VOC 84 CO 50 NO _x	--	--	
315	Mass	lb/gal	--	--	Stack testing for

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	Balance	2.1 VOC No HAPs			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 Factors	lb/lb rubber: 6.50E-05 PM 1.50E-03 VOC	--	--	A single test was conducted on September 26, 2013. Maximum throughput is 3,000 pounds of EPDM per hour and 15,600,000 pounds per year

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
03, 08B – 08H	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.
08B – 08H	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.	

17. 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				

18. 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	
16D & 16E	Boiler fuel	Natural gas only	Continuously	No
16D & 16E	Boiler fuel combusted	None	Monthly	No
03, 103, 104	VOC emission factor	4.20E-04 lb VOC/lb rubber	Monthly	No
08B – 08H		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
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	Monthly	No

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
		outlined in §60.4211(f)		

19. 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, 16D, 16E, 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

20. DELETED CONDITIONS:

Former SC	Justification for removal
	None

21. GROUP A INSIGNIFICANT ACTIVITIES:

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

Source Name	Group A Category	Emissions (tpy)							
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs		
							Single	Total	
Devulcanization Paraffinic Oil Storage Tank (10,000 gallons)	3			0.0038				0.0038	0.0038
Diesel Storage Tank (650 gallons)	3			0.0005				0.0005	0.0005
Seam Tape Testing Lab Vent	5			0.19				0.095	0.19

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
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	0.41						
Mixtruder Cooling Tower	13	0.44						
Day Tanks for SN-317	13			1.09E-4			1.09E-4	1.09E-4
Comerio Line Shredder	13	0.10		0.1			0.06	0.11
Bark & Horz. Hog	13	1.05						
Slab Dip/Soap Tanks	13	1.05						

22. 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-27

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-
16

Facility Name:

Permit Number:

AFIN:

	Old Permit	New Permit
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		Permit Predominant Air Contaminant	95	95
\$/ton factor	27.27	Net Predominant Air Contaminant Increase	0	
Minimum Fee \$	400	Permit Fee \$	400	
Minimum Initial Fee \$	500	Annual Chargeable Emissions (tpy)	95	
Check if Administrative Amendment	<input type="checkbox"/>			

Pollutant (tpy)	Old Permit	New Permit	Change
PM	37.6	35.3	-2.3
PM ₁₀	36.8	34.5	-2.3
PM _{2.5}	0	0	0
SO ₂	1	0.9	-0.1
VOC	95	95	0
CO	58.3	31.8	-26.5
NO _x	57.9	42.1	-15.8
Single HAP	9.5	9.5	0
Total HAPs	24.5	23.9	-0.6