STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1145-AR-13 AFIN: 60-00049

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

CT GS Building Products, Inc.
2701 East Roosevelt Road
Little Rock, Arkansas 72206

3. PERMIT WRITER:

Jacob Allen

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Asphalt Shingle and Coating Materials Manufacturing
NAICS Code: 324122

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
9/27/2024	Modification	Removal of SN-182 and SN-183. Adding SN-920 and SN-921
4/21/2025	Administrative Amendment	Addition of a printer to IA's

6. REVIEWER'S NOTES:

GS Roofing Products Company (GS Roofing), currently owned by CertainTeed Corporation, operates an asphalt roofing manufacturing facility in Little Rock, Arkansas (Pulaski County). GS Roofing requested a modification to add a new recycling system which includes a new Ceco Filter (SN-920), a new baghouse (SN-921), route emissions from SN-118 to SN-918, and remove SN-182 and SN-183. An additional application was submitted to add a printer to the IA list.

7. COMPLIANCE STATUS:

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

The last inspection was performed on July 10th, 2023. No enforcement actions or compliance issues were identified in EPA's ECHO. The facility was marked out of compliance for installing an unpermitted 30 kW Emergency Generator, this generator was added to permit 1697-AOP-R9.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? 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)
Asphalt Storage Tanks (SN-120, SN-144, SN-145, SN-206, SN207 & SN-917), Mineral Handling & Storage Equipment (SN-148, SN-149, SN-151, SN-152, SN-153, SN-154, SN-165, SN-166, & SN-167), Pre-coaters & Coaters (SN-102, SN-103, SN-131, & SN-132)	PM/PM_{10}	40 CFR Part 60 (NSPS) Subpart UU – Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture
SN-102, 103, 131, and 132	PAH/PM	40 CFR 63 (NESHAP) Subpart AAAAAAA (7A) – National Emission Standards For Hazardous Air Pollutants For Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing
SN-919	HAPs	40 CFR 60 Subpart JJJJ 40 CFR 63 Subpart ZZZZ

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.)

12. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

13. 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:

This permit contains a TLV table for non-criteria pollutants. Modeling was used to determine the permitted emission rates for ranges of non-criteria pollutants (grouped by TLV) that pass the PAER or PAIL. Therefore, modeling of specific non-criteria pollutants was not performed.
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/m^3), 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?
Formaldehyde	1.5	0.165	2.1097	Yes*
Carbonyl Sulfide[1]	24.57	2.703	0.96	Yes
Glycol Ethers[2]	95	10.45	0.5	Yes
Polycyclic Organic Matter (POM)[3]	0.2	0.022	0.04	No

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Toluene	188	20.68	0.30	Yes

1. The TLV for Carbonyl Sulfide was not reported in the ACGIH. Based on H_2S.
2. The TLV for Glycol Sulfide was not reported in the ACGIH. Used EPA website info.
3. The TLV for POM is based on the TLV for Phenanthrene.

* Since Formaldehyde is under 10 tpy and the TLV is greater than 1 modeling is not required.

2nd Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL ($\mu g/m^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu g/m^3$)	Pass?
Polycyclic Organic Matter (POM)	2	0.3064	Yes

c) H_2S 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 H_2S Standards Y
If exempt, explain: No H_2S Present

14. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)		Control Equipment	Control Equipment Efficiency	Comments
102,103, 104, 105	Asphalt Roofing Manufacturers Association (ARMA)	VOC CO Formaldehyde Carbonyl Sulfide	0.359 0.0754 0.00915 0.00808			(Emission factor are based on pound of pollutant per ton of asphalt processed)*
102,103, 131, 132	NSPS Subpart UU	PM	0.08 lb/ton of roll roofing produced			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)		Control Equipment	Control Equipment Efficiency	Comments
104	AP-42 §13.2.4	PM	0.00032			Aggregate Handling & Storage
105,137	ARMA	PM	0.85			*
113,114, 116, 116,117, 118,120, 131,133, 134,135, 136, 137,144, 145, 156,159, 164, 205, 207	VOC emission factor based on stack test data	VOC	0.17			VOC emission factor based on July 2007 stack test data as measured by EPA Test Method 25A
132	stack test data	VOC	0.13			July 2007 stack test data
113,116, 117, 118,120, 131, 133,134, 135, 136,137, 144, 156,159, 207	ARMA	CO	0.0754			*
113,164, 205	ARMA	CO	0.0202			*
114,145	ARMA	CO	0.019			*
113	ARMA	Formaldehyde Carbonyl Sulfide	0.0252 0.0046			*
114,115	ARMA	Formaldehyde Carbonyl Sulfide	0.00397 0.00025			*
116,117, 118,120, 144,156, 159,206, 207	ARMA	Formaldehyde Carbonyl Sulfide	0.00568 0.0049			*
164, 205	ARMA	Formaldehyde	0.0252			*

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)		Control Equipment	Control Equipment Efficiency	Comments
		Carbonyl Sulfide	0.0046			
131 thru 137	ARMA	Formaldehyde Carbonyl Sulfide	0.00915 0.00808			*
113		PM	----			Emissions from 113 are routed to SN-903 (Baghouse)
114,145, 205	ARMA	PM	0.5000			
116,117, 118, 120,144, 159, 206,207	ARMA	PM	0.105			
164	ARMA	PM	----			Emissions from 164 are routed to SN-912 (Baghouse)
133,134, 135,136	ARMA	PM	0.00032			Surfacing PM/PM10 - All PM/PM10 is composed of organic compounds . Therefore, the total VOC emissions are the sum of THC (as carbon) and the emitted PM/PM10.
129,122, 115,119, 121,	AP-42 §1.4(NG) and AP-42 1.5(Propane)		MMBtu/h			These Sources may use

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)			Control Equipment	Control Equipment Efficiency	Comments
143,158, 157, 160,139, 180							propane as a backup fuel
			NG	Propane			
		CO	0.0824	0.0210			
		NOx	0.098	0.155			
		PM/PM10	0.0075	0.0044			
		SO2	0.0006	0.0166			
		VOC	0.0054	0.0055			
SN-106, SN-140, SN-178	Mass Balance						Paint, part washer usage. Max VOC content lb/gal.
131,132, 102, 103	ARMA	PM/PM10 THC(as C) CO Toluene Formaldehyde Carbon Sulfide Phenol	0.850 0.359 7.54E-02 6.18E-03 9.15E-03 8.08E-03 2.52E-04 (lb/ton Asphalt)				Emission for SN 131 & 132 are routed to SN-907; Emission from SN-102 routed to SN-912 and emission from SN-103 routed to SN-902
SN-175	Tank Program		-				
SN-902	ARMA	PM/PM10	NSPS Subpart UU				Must meet NSPS UU PM limit 0.08 lb/ton
SN-903	Publication from EPA's Clean Air Technology Center (CATC)	PM/PM_{10}, also captures VOC: the Emission rate is the sum of grain loading PM contribution	0.02 (gr/ft3)				Baghouse exit flow rate: 5400 cubic feet per minute (cfm).

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)		Control Equipment	Control Equipment Efficiency	Comments
		plus 10% any THC				(Vents SN-109,110,111,112, and 113)
SN-904		PM/PM_{10}	0.02 gr/ft3			Baghouse exit flow rate: 1000 cfm
SN-905	CATC	PM/PM_{10}	0.02 gr/ft3			Baghouse exit flow rate: 900 cfm
SN-906	CATC	PM/PM_{10}, also captures VOC: the Emission rate is the sum of grain loading PM contribution plus 10% any THC	0.02 (gr/ft3)			Baghouse exit flow rate: 12,800 cfm. Vents SN-125, 127, 128.
SN-907	NSPS Subpart UU	PM/PM_{10}	0.02 (gr/ft3)			Must meet NSPS UU PM limit 0.08 lb/ton
SN-908	CATC	PM/PM_{10}	0.02 (gr/ft3)			Baghouse exit flow rate: 1000 cfm, passive.
SN-909	CATC	PM/PM_{10}	0.02 (gr/ft3)			Baghouse exit flow rate: 900 cfm, passive
SN-910	CATC	PM/PM_{10}	0.02 (gr/ft3)			Baghouse exit flow rate: 1800cfm
SN-911	CATC	PM/PM_{10}	0.02 (gr/ft3)			Baghouse exit flow rate: 1000 cfm

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)		Control Equipment	Control Equipment Efficiency	Comments
SN-912	CATC	PM/PM_{10}, also captures VOC: the Emission rate is the sum of grain loading PM contribution plus 10% any THC	0.02 (gr/ft3)			Baghouse exit flow rate: 4500 cfm. Vents SN-164
SN-913	CATC	PM/PM_{10}	0.02 (gr/ft3)			Baghouse exit flow rate: 1050 cfm.
SN-914	CATC	PM/PM_{10}	0.02 (gr/ft3)			Baghouse exit flow rate: 3,000 cfm
SN-915	CATC	PM/PM_{10}, also captures VOC: the Emission rate is the sum of grain loading PM contribution plus 10% any THC	0.02 (gr/ft3)			Baghouse exit flow rate: 433 cfm passive. Must meet NSPS UU PM limit 0.08 lb/ton
SN-916		PM/PM_{10}	0.02 (gr/ft3)			Baghouse exit flow rate: 1500 cfm
SN-919	AP-42 3.2-3 Table (7/00)	lb/MMBtu PM = 0.00993 PM_{10} = 0.0000771 SO_2 = 0.000588 Formaldehyde = 0.0528 VOC = 0.118 CO = 0.557 NO_X = 4.08		Uncontrolled	N/A	Generac 30 kW natural gas 0.502 MMBtu/hr Emergency 500 hr/yr
SN-918	stack test data ARMA – pound of pollutant per ton of asphalt processed	VOC PM/PM10 CO Formaldehyde Carbonyl Sulfide	0.17 0.105 0.0754 0.00568 0.0049	VOC Ceco Filter	90%	Emissions from SN-917 are routed to SN-918

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)		Control Equipment	Control Equipment Efficiency	Comments
		POM	0.0000986			
SN-920	ARMA	PM/PM10 VOC CO Formaldehyde Carbonyl Sulfide POM	0.11 0.05 0.08 0.01 0.005 0.0000986	PM/PM10 Ceco Filter	90%	Emissions from #1 Batch Tank and #1 Holding Tank
SN-921	Default grain loading factor for baghouse	PM/PM10	0.010 (gr/ft3)			Baghouse Exit Flow Rate: 3,200 cfm

15. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
SN-131 and SN-132 (Outlet of SN-907)	PM/PM_{10}	5A, 22, 9	per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits.
SN-145 (Outlet of SN-907)	PM/PM_{10}	9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits. Please see Specific Condition 26 for details.
SN-120 (Outlet of SN-902)	PM/PM_{10}	9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits. Please see Specific Condition 26 for details.
SN-148 (Outlet of SN-908)	PM/PM_{10}	9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits. Please see Specific Condition 26 for details.
SN-149 (Outlet of SN-909)	PM/PM_{10}	9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission

SN	Pollutants	Test Method	Test Interval	Justification
				limits. Please see Specific Condition 26 for details.
SN-151, SN-152, and SN-153 (Outlet of SN-910)	PM/PM_{10}	9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits. Please see Specific Condition 26 for details.
SN-154 (Outlet of SN-911)	PM/PM_{10}	9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits. Please see Specific Condition 26 for details.
SN-165, SN-166, SN-167 (Outlet of SN-913)	PM/PM_{10}	9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits. Please see Specific Condition 26 for details.
SN-102 and SN-103 (Outlet of SN-915 and 902)	PM/PM_{10}	5A, 22, 9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits.
SN-917 (Outlet of SN-918)	PM/PM_{10}	9	Testing per 40 CFR §60.8	To demonstrate compliance with the permitted emission limits. Please see Specific Condition 26 for details.

16. 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)
907, 902, and 915	Inlet temperature reading	Thermocouple	Continuously	N
902 and 915	Pressure Drop Across Unit	Pressure Gauge	Weekly	N

17. 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)
Plantwide	Asphalt usage		96,850 tpy	Monthly	N
Plantwide	Roofing Material Production		205,000 tpy	Monthly	N
178	Part Washer Solvent VOC limit		8.0 lb/gallon	Monthly	N
106 and 140	HAPs usage		5.0 tons	Monthly	N
	VOC limit		See Specific Condition # 5		
106 and 140	Paint		2 lb/gallon	Monthly	N
919	Total Operating Hours		Maximum 500 hrs/yr each total (emergency and non-emergency)/rolling 12 months	Monthly	No
919	Compliance with NESHAP Subpart ZZZZ	Compliance with NESHAP Subpart JJJJ	Applicable emission & operating limitations, no later than October 19, 2013	Monthly	No
919	Non-emergency operation: maintenance checks and readiness testing		Any operation other than emergency operation, for 50 hours per year, which count towards the 100 hours/calendar year maintenance and testing	As occurs	No
919	Subpart ZZZZ of Part 63 – monitoring results, maintenance log		Operating limitations and other requirements apply at all times.	As occurs – Report any deviation	Yes
919	Manufacturer's written Instructions		Follow manufacturer's maintenance instructions & NESHAP Subpart JJJJ and NESHAP Subpart ZZZZ or develop and follow own maintenance plan	Keep on-site	No
919	Maintenance Logs		a. Change oil and filter every 500 hours of op or	As stated	No

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
		annually, whichever occurs first. The permittee has the option to utilize an oil analysis program as described in §63.6625(j) in order to extend the specified oil change requirement in Table 2C of Subpart ZZZZ of Part 63, items #6, footnote 2; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation, or annually, whichever comes first, and replace as necessary.		

18. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
SN-122	20	19.503	Testing per 40 CFR §60.8
104, 105, 106, 118, 126, 133, 134, 135, 136, 137, 140, 146, 147, 150, 156, 159, 178, 179, 903, 904, 905, 906, and 912.	5	18.501	Testing per 40 CFR §60.8
SN-902 when SN-103 is operating.	20	19.503	Testing per 40 CFR §60.8
SN-902 when SN-103 is not operating and SN-120 is operating	0	60.472(c)	Testing per 40 CFR §60.8
SN-915 when SN-102, 207, and 206 are operating.	20	19.503	Testing per 40 CFR §60.8
SN-915 when 102 is not operating, and 207, 206 are operating.	0	60.472(c)	Testing per 40 CFR §60.8
SN-907 when SN-131 and SN-132 are operating.	20	60.472(a)(2)	Testing per 40 CFR §60.8

SN	Opacity	Justification for limit	Compliance Mechanism
SN-907 when SN-131 and SN-132 are not operating and SN-145 is operating.	0	60.472(c)	Testing per 40 CFR §60.8
SN-144	0	40 CFR Part 60.472(c)	Testing per 40 CFR §60.8
SN-908, 909, 910, 911,913, 916, and 921.	1	40 CFR Part 60.472(d)	Testing per 40 CFR §60.8
SN-918 and SN-920	0	40 CFR Part 60.472(c)	Testing per 40 CFR §60.8
SN-919	5	§18.501 & A.C.A.	Natural gas as fuel

19. DELETED CONDITIONS:

Former SC	Justification for removal
N/A	

20. 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
Roofing Line Shrink Wrap	A-13	0	0	0	0	0	0	0
Coating Asphalt Heater, 3.5 MM Btu/hr	A-1	0	0	0	0	0	0	0
Roofing Line SBS Modified Asphalt Storage Tank Heater, 0.8 MM Btu/hr	A-1	0	0	0	0	0	0	0
Roofing Line SBS Storage Tank and Heater, 2.5 MM Btu/hr	A-1	0	0	0	0	0	0	0
Modified Line Backing Film Applicator	A-13	0	0	0	0	0	0	0

Modified Line Sheet Edge Flame Shrinking, 0.03 MM Btu/hr	A-1	0	0	0	0	0	0	0
Modified Line Shrink Wrap	A-13	0	0	0	0	0	0	0
Modified Line Pre-Coater Storage Tank Heater, 0.8 MM Btu/hr	A-1	0	0	0	0	0	0	0
Modified Line APP Polymer Storage Tank	A-3	0	0	0	0	0	0	0
Modified Line SBS Flux Storage Tank Electric Heater	A-13	0	0	0	0	0	0	0
Modified Line Hot Oil Heater, 6.0 MM Btu/hr	A-1	0	0	0	0	0	0	0
Modified Line APP Flux Storage Tank Heater, 0.8 MM Btu/hr	A-1	0	0	0	0	0	0	0
Modified Line Tectifier Resin Storage Tank	B-21	0	0	0	0	0	0	0
1,500 gallon Diesel Tank	A-3	0	0	0	0	0	0	0
Kerosene Storage Tank	A-3	0	0	0	0	0	0	0
Modified Line Sheet Splicing, 0.06 MM Btu/hr	A-1	0	0	0	0	0	0	0
Printer for Production Printing	A-13	0	0	0.34	0	0	0.026 (Acetone)	0

21. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1145-AR-12

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Facility Name: CT GS Building Products, Inc.
Permit Number: 1145-AR-13
AFIN: 60-00049

			Old Permit	New Permit
$/ton factor	28.14	Permit Predominant Air Contaminant	95.9	93.1
Minimum Fee $	400	Net Predominant Air Contaminant Increase	-2.8	
Minimum Initial Fee $	500			
		Permit Fee $	400	
Check if Administrative Amendment	☐	Annual Chargeable Emissions (tpy)	93.1	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	85.3	83.7	-1.6
PM_{10}	85.3	84	-1.3
$PM_{2.5}$			0
SO_2	1.4	1.3	-0.1
VOC	95.9	93.1	-2.8
CO	27.1	26.2	-0.9
NO_X	12	10.2	-1.8
Ammonia	1.4	0	-1.4
Formaldehyde	9.12	3.5745	-5.5455
Carbonyl Sulfide	1.84	1.87	0.03
POM	0.02	0.03	0.01
HAPs	3.01	3	-0.01
Toluene	0.55	0.55	0