

# ADEQ MINOR SOURCE AIR PERMIT

Permit #: 1145-AR-5

IS ISSUED TO:

GS Roofing Products Company  
2701 E. Roosevelt Road  
Little Rock, AR 72206  
Pulaski County  
AFIN: 60-00049

THIS PERMIT IS YOUR AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND YOUR APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 ET SEQ.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

\_\_\_\_\_  
Mike Bates  
Chief, Air Division

\_\_\_\_\_  
Date

Table of Contents

Section I: FACILITY INFORMATION.....4  
Section II: INTRODUCTION.....5  
Summary of Permit Activity.....5  
Process Description.....5  
Regulations.....8  
Total Allowable Emissions.....9  
Section III: PERMIT HISTORY.....10  
Section IV: EMISSION UNIT INFORMATION.....11  
NSPS Conditions.....22  
Section V: INSIGNIFICANT ACTIVITIES.....26  
Section VI: GENERAL CONDITIONS.....27  
Appendix A.....31

## List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
No.	Number
NO <sub>x</sub>	Nitrogen Oxide
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter Smaller Than Ten Microns
SO <sub>2</sub>	Sulfur Dioxide
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

## SECTION I: FACILITY INFORMATION

PERMITTEE: GS Roofing Products Company

AFIN: 60-00049

PERMIT NUMBER: 1145-AR-5

FACILITY ADDRESS: 2701 E. Roosevelt Road  
Little Rock, AR 72206

MAILING ADDRESS: 2701 E. Roosevelt Road  
Little Rock, AR 72206

COUNTY: Pulaski

CONTACT POSITION: Harold Zimmerman, Plant Manager

TELEPHONE NUMBER: (501) 375-9173

REVIEWING ENGINEER: Siew Low

UTM North-South (X): Zone 15 3,842.30

UTM East-West (Y): Zone 15 569.40

## **SECTION II: INTRODUCTION**

### **Summary of Permit Activity**

GS Roofing, located at 2701 E. Roosevelt Road, Little Rock, Arkansas 72206, owns and operates an asphalt roofing manufacturing facility. The plant contains two separate manufacturing lines: a "Roofing" Line which produces traditional smooth-surfaced roll roofing products and a "Modified" Line which utilizes modified asphalt. The facility produces smooth-surfaced and mineral-surfaced roll roofing products. This permit modification authorizes the installation and operation of a new reflective coating process line. The process equipment includes a natural gas-fired infrared dryer (SN-183), and a reflective coating applicator (SN-182). A plant-wide limit of 95 tpy of VOC is maintained to remain a minor source.

### **Process Description**

#### **Roofing Line Process Description**

##### **Roofing Line Production Operations**

The Roofing Line is capable of processing glass mat or dry organic felt. Glass mat is unrolled from an unwind stand and passes through the saturator (SN-101- which is not used when processing glass mat), pre-coater (SN-102), and the coater (SN-103). In the coater, the glass mat passes under smoothing rolls partially submerged in filled coating between 400 to 420 degree Fahrenheit.

Dry organic felt is unrolled from an unwind stand and fed to the dip saturator (SN-101) where the felt runs over a series of idlers staggered in two rows. The felt becomes saturated as it passes under the lower row of idlers submerged in hot asphalt at 205 to 250°C (400 to 480°F.). The felt then passes through the pre-coater (SN-102) and the coater (SN-103).

After leaving the coater, the mat passes through the granule applicator (SN-104) where granules or sand are fed onto the hot, filled coated surface. The surface minerals are pressed into the coating as the sheet passes around a turn drum, exposing the backside. Sand is then applied to the backside and pressed into the coating.

After mineral surfacing, the glass mat or organic felt is cooled rapidly by water-cooled rolls (SN-105) and passes through press rolls used to firmly embed the granules into the filled coating. The mat then passes through a drying section where it is air-cooled.

A finish looper in the line allows continuous movement of the sheet through the preceding operations and servers to further cool and dry the roofing sheet. Paint is applied to the sheet at the Roofing Line Laying Line Applicator (SN-106) to serve as a guide to the Roofer during installation. Roll roofing is completed at this point and moves to a winder where rolls are formed. After

GS Roofing Products Company  
Permit #: 1145-AR-5  
AFIN: 60-00049

winding, a product label is printed (SN-107) on each roll and pallets of final product roll are wrapped in plastic using a shrink-wrapping machine (SN-108).

### Roofing Line Asphalt Heating and Mixing Operations

Saturant asphalt is heated to approximately 480 degree Fahrenheit in the saturant heater (SN-122), and fed to the saturator from a saturant storage tank (SN-120). Saturant asphalt from the saturator is continuously recycled back from the saturator to the storage tank where a natural gas-fired heater (SN-121) keeps the asphalt hot. To facilitate asphalt flow, all roofing line process piping in hot asphalt service is traced by hot oil. Coating asphalt from SN-117 is heated by a natural gas fired heater (SN-115). SBS asphalt flux is heated in a storage tank (SN-118) by a natural gas fired heater (SN-119). Granules, dry sand, or other filler material is transferred from tank trucks and railcars to the corresponding storage tanks (SN-109, SN-123, and SN-126) using multiple conveyor belts. Dust collectors control particulate emissions from the sand, granule, and filler tanks. Filler and hot asphalt are combined at the horizontal mixer (SN-113) at approximately 400 degree Fahrenheit. This mixture is further mixed in a vertical mixer (SN-114) until it is used at the coater. Rotary dies apply the filled asphalt coating to the lower side of the saturated felt, which enters the coater (SN-103) at approximately 400 degree Fahrenheit from the saturator (SN-101).

Air emissions from Saturator (SN-101), Pre-coater (SN-102), Roofing Line Pre-Coater Use Tank (SN-116) are routed to SN-901, Roofing Line High Energy Air Filter. Air emissions from the Coater (SN-103), Saturant Storage Tank (SN-120), Coating Storage Tank (SN-117) and the Vertical Mixer (SN-114) are routed and vented to SN-902, Roofing Line Ceco Filter. Air emission from Roofing Line Filler Delivery and Storage Silo (SN-109), Roofing Line Filler Heater (SN-110), Roofing Line Hot Filler Elevator (SN-111), Roofing Line Hot Filler Use Bin (SN-112), and Roofing Line Horizontal Mixer (SN-113) are routed to SN-903, Roofing Line Hot Filler System Baghouse. Air emission from Roofing Line Sand Transfer Storage Bin (SN-124) is routed to SN-904. Air emission from SN-123 is routed to SN-905. Air emission from Granule Use Bin (SN-127), Roofing Line Sand Use Bin (SN-125), and Roofing Line Sand/Granule Reclaim System (SN-128) are routed to SN-906. Emissions from SN-901 and SN-902 should have accounted for different ambient temperature.

## **Modified Line Process Description**

### Modified Line Production Operations

The Modified Line operates similarly to the roofing line but uses modified asphalt containing rubber or olefin polymers. The Modified Line only uses a pre-coater (SN-131) and coater (SN-132).

Polyester mat is unrolled from an unwind stand and fed to the pre-coater where the mat passes over

GS Roofing Products Company  
Permit #: 1145-AR-5  
AFIN: 60-00049

a series of idlers. The mat becomes saturated as it passes through the pre-coater submerged in hot asphalt at 380 to 400 degree Fahrenheit. Air emissions from the pre-coater and coater operation are vented to a Monsanto Coalescing Filter (SN-907).

After leaving the coater, the sheet is made into mineral-surfaced rolls by passing the sheet through granule applicators (SN-133 and SN-134) where granules are fed onto the hot, coated surface. The granules or talc are pressed into the compound as the mat passes around a press roll where it is reversed, exposing the bottom side. Sand or Flamina (i.e., film) is applied to the back surface (SN-135 and SN-136) and is pressed into the compound. Some modified products have a film applied to the front and back of the polyester mat. Some products receiving a film pass through a sheet edge flame (SN-139) to shrink the excess film.

After mineral surfacing, the mat is cooled rapidly by a water bath and water-cooled rolls (SN-137) and pass through press rolls used to firmly embed any granules into the filled coating. The sheet then passes through a cooling section where it is air-cooled.

A finished product looper in the line allows continuous movement of the sheet through the preceding operations and serves to further cool and dry the roofing sheet. Paint is applied to the sheet at the Modified Line Laying Line Applicator (SN-140) to serve as a guide to the Roofer during installation. The product is completed at this point and moves to the winder where rolls are formed. After winding, a product label is printed (SN-130) on each roll, and pallets for final product roll are wrapped in plastic using a shrink-wrapping machine (SN-141).

#### Modified Line Asphalt Heating and Mixing Operations

Unmodified coating asphalt is fed to the pre-coater use tank (SN-144) from the modified line pre-coater storage tank (SN-142), which is heated by SN-143. Pre-coater asphalt is continuously recycled back from the pre-coater to the pre-coater use tank. To facilitate the asphalt flow, all modified line process piping in hot asphalt service is traced by hot oil from the modified line hot oil heater (SN-158). APP asphalt flux and SBS asphalt flux used at the coater are heated in storage tanks (SN-159 and SN-156) by natural gas fired and electric heaters, respectively. Dry sand, talc, and other filler material are unloaded from tank trucks and bags and transferred to storage tanks (SN-146, SN-148, SN-149, SN-151, and SN-154). The sand silo dust collectors (SN-908 and SN-909), the Talc System Baghouse (SN-910), and the Filler System Baghouse (SN-911) control particulate emissions from the sand, talc, and filler tanks. APP polymer is stored under a nitrogen blanket (SN-155). Modified coating is produced in the compound mixers (SN-164) by combining various mixtures of APP Flux or SBS Flux with APP Homopolymer, filler, various dry chemicals, or polymers. This mixture is transferred into a vertical mixer (SN-145) until it is used at the coater. Rotary dies apply the modified asphalt, which enters the coater at approximately 400 degree Fahrenheit, to the polyester mat.

Air emissions from Modified Line Pre-Coater (SN-131), Modified Line Coater (SN-132), and

GS Roofing Products Company  
Permit #: 1145-AR-5  
AFIN: 60-00049

Modified Line Vertical Mixer (SN-145) are routed to SN-907, Modified Line Monsanto Coalescing Filter. Air emissions from Modified Line Sand Delivery Storage Silo #1 (SN-148) are routed to SN-908. Air emissions from Modified Line Sand Delivery Storage Silo #2 (SN-149) are routed to SN-909. Air emissions from Modified Line Talc Bag Dumping Bin (SN-151), Modified Line Talc Screw Conveyor and Bucket Elevator (SN-152), and Modified Line Talc Storage Silo (SN-153) are routed to SN-910. Air emissions from Modified Line Filler Delivery System and Storage Silo (SN-154) are routed to SN-911. Air emission from Modified Line IPP Polymer Storage Hopper #1 and #2 (SN-161 and SN-162), Modified Line SBS Polymer Storage Hopper (SN-163) are routed to SN-914. Air emissions from Modified Line Compound Mixers (5 mixers) (SN-164) are routed to SN-912. Air emissions from Modified Line Dry Chemical Storage Tanks #1, #2, and #3 (SN-165, SN-166, and SN-167), Modified Line Surge Bins (five bins) are routed to SN-913.

### **Miscellaneous Operations**

The reflective coating process line includes a natural gas-fired infrared dryer (SN-183), and a reflective coating applicator (SN-182) is used to apply a reflective coating to roll roofing products. Storage tanks at the plant contain tackifier resin (SN-173), diesel fuel (SN-174), gasoline (SN-175), kerosene (SN-176), and soap (SN-177 and SN181). GS Roofing also operates various self-contained parts washers (SN-178) to perform cleaning activities. These tanks and washers support various operations at the facility.

### **Regulations**

The following table contains the regulations applicable to this permit

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective December 19, 2004
New Source Performance Standards (NSPS) Part 60, Subpart UU, <i>Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture.</i>



GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	50.3	73.9
PM <sub>10</sub>	50.3	73.9
SO <sub>2</sub>	1.0	1.8
VOC	251.1	95.5
CO	9.6	14.6
NO <sub>x</sub>	2.6	11.4
Ammonia	0.4	1.4
<i>Formaldehyde</i>	1.28	1.41
<i>Carbonyl Sulfide</i>	0.72	0.73
<i>Polycyclic Organic Matter*</i>	0.11	0.08
<i>HAPs**</i>	2.02	5.0
<i>Benzene</i>	0.16	0.19
<i>Toluene</i>	0.30	0.37
<i>1,1,2,2-Tetrachloroethane</i>	0.02	0.02
<i>Ethylidene Dichloride</i>	0.04	0.05
<i>Propionaldehyde</i>	0.18	0.21

\* Include emissions of 2-methyl naphthalene, phenanthrene, and acenaphthalene.

\*\* HAPs emission limits used at SN-106, SN-107, SN-130, and SN-140 only.

*Italics* - indicates all Hazardous Air Pollutants (HAPs). HAPs included in the VOC totals. Other HAPs are not included in any other total unless specifically stated.

GS Roofing Products Company  
Permit #: 1145-AR-5  
AFIN: 60-00049

### SECTION III: PERMIT HISTORY

The Roofing Line was originally constructed in the 1970's at the Little Rock facility. The Roofing Line High Energy Air Filter (SN-902) is the only equipment moved from Martinez, California facility in 1985. The Modified Line was newly constructed at Little Rock in 1984 and 1985. CertainTeed purchased GS Roofing in 1999 and advised that the name should remain as "GS Roofing."

The initial Air Permit, 1145-A was issued on April 25, 1993.

On August 3, 1993, Air Permit 1145-AR-1 was issued. In this permitting action, ESP (SN-09) was replaced with an air filter (SN-26), and a boiler was replaced by a hot oil heater.

On October 24, 2000, Air Permit 1145-AR-2 was issued. In this permitting action incorporated sources removed from service, installation of a dust collector on the Modified Line compound mixing tanks process, installation of a pre-impregnator vat on the Modified Line, designated sources as insignificant activities, and included the Modified Line baghouse which was not included in the first Air Permit.

On April 15, 2003, Air Permit 1145-AR-3 was issued. In this permitting action, the facility installed two new compound mixers on the modified line, installed three dry chemical storage tanks and a baghouse, installed a pneumatic conveying system, installed a new ceco filter, installed a new roofing line hot filler system baghouse, modified the modified line by installing a new coater, installed a new soap mix tank, installed a roofing line surfacing/granule reclaim system baghouse, installed a tackifier resin storage tank, installed five new surge hoppers, identified all emission sources individually, renumbered all emission sources, updated emission factors, added to the permit existing equipment for which emissions data did not exist in the previous permit, and revised asphalt usage limits. Total allowable emissions increased 54.0 tons/year of PM, 56.1 tons/year of PM<sub>10</sub>, 0.9 tons/year of sulfur dioxide, 3.3 tons/year of nitrogen oxides, 84.1 tons/year of volatile organic compounds, 7.9 tons/year of carbon monoxide, and 2.23 tons/year of total HAPs.

On January 24, 2005, Air Permit 1145-AR-4 was issued (amended on March 16, 2005). This permitting action included revised language and specific conditions to reflect the applicability of 40 CFR Part 60 Subpart UU, *Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture*. The permit also authorized the revision of VOC emissions by increasing the permitted materials usage and incorporating more representative emission factors, the installation of a 1,000 cubic feet per minute blower on the Modified Line Sand Silo Baghouse #1 (SN-908) with additional duct work to extend the exhaust point above the building roof, and an increase of the allowable VOC and glycol ether content limits to 2.0 lb per gallon for paint and ink and 8.0 lb/gal for solvent. SN-129 was dismantled and removed in this application.

## SECTION IV: EMISSION UNIT INFORMATION

### Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 19, §19.501 et seq., effective December 19, 2004 and A.C.A. §8-4-203 as referenced by A.C.A. §8 4 304 and §8 4 311]

SN	Description	Pollutant	lb/hr	tpy
SN-101	Roofing Line Saturator	Emissions routed to SN-901		
SN-102	Roofing Line Pre-Coater	Emissions routed to SN-901		
SN-103	Roofing Line Coater	Emissions routed to SN-902		
SN-104	Roofing Line Surfacing Section	PM <sub>10</sub>	0.3	1.0
SN-105	Roofing Line Cooling Section	PM <sub>10</sub>	15.8	9.0
		CO	0.5	0.5
		VOC	21.1	95.5*
SN-106	Roofing Line Laying Line Applicator	VOC	0.3	*
SN-107	Roofing Line Ink Jet Label Applicator	VOC	0.8	*
SN-109	Roofing Line Filler Delivery and Storage Silo	Emissions routed to SN-903		
SN-110	Roofing Line Filler Heater	Emissions routed to SN-903		
SN-111	Roofing Line Hot Filler Elevator	Emissions routed to SN-903		
SN-112	Roofing Line Hot Filler Use Bin	Emissions routed to SN-903		
SN-113	Roofing Line Horizontal Mixer	Emissions routed to SN-903		
SN-114	Roofing Line Vertical Mixer	Emissions routed to SN-902		
SN-116	Roofing Line Pre-Coater Use Tank	Emissions routed to SN-901		
SN-117	Roofing Line Coating Storage Tank	Emissions routed to SN-902		
SN-118	Roofing Line SBS Modified Asphalt Storage Tank	PM <sub>10</sub>	1.1	0.2
		CO	0.3	0.1
		VOC	1.8	*
SN-120	Roofing Line Saturant Storage Tank	Emissions routed to SN-902		
SN-122	Roofing Line Saturant Heater, 7.0 MM Btu/hr	PM <sub>10</sub>	0.1	0.3
		SO <sub>2</sub>	0.2	0.6
		VOC	0.1	*
		CO	0.6	2.6
		NO <sub>x</sub>	1.1	4.8
SN-123	Roofing Line Sand Delivery and Storage Silo	Emissions routed to SN-905		
SN-124	Roofing Line Sand Transfer Storage Bin	Emissions routed to SN-904		
SN-125	Roofing Line Sand Use Bin	Emissions routed to SN-906		

GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

SN	Description	Pollutant	lb/hr	tpy
SN-126	Granule Delivery and Storage Silos	PM <sub>10</sub>	0.1	0.1
SN-127	Granule Use Bin	Emissions routed to SN-906		
SN-128	Roofing Line Sand/Granule Reclaim System	Emissions routed to SN-906		
SN-130	Modified Line Ink Jet Applicator	VOC	0.8	*
SN-131	Modified Line Pre-Coater	Emissions routed to SN-907		
SN-132	Modified Line Coater	Emissions routed to SN-907		
SN-133	Modified Line Granule Surfacing Applicator #1	PM <sub>10</sub>	0.2	0.6
SN-134	Modified Line Granule Surfacing Applicator #2	PM <sub>10</sub>		
SN-135	Modified Line Back Surfacing Applicator #1	PM <sub>10</sub>	0.2	0.6
SN-136	Modified Line Back Surfacing Applicator #2	PM <sub>10</sub>		
SN-137	Modified Line Cooling Section Water Bath	PM <sub>10</sub>	4.7	7.9
		CO	0.4	0.7
		VOC	6.5	*
SN-140	Modified Line Laying Line Applicator	VOC	0.3	*
SN-142	Modified Line Pre-Coater Storage Tank	PM <sub>10</sub>	0.4	0.2
		CO	0.2	0.1
		VOC	1.0	*
SN-144	Modified Line Pre-Coater Use Tank	PM <sub>10</sub>	0.4	0.2
		CO	0.2	0.1
		VOC	1.0	*
SN-145	Modified Line Vertical Mixer	Emissions routed to SN-907		
SN-146	Modified Line Granule Storage Bin	PM <sub>10</sub>	0.1	0.1
SN-147	Modified Line Granule Use Bin	PM <sub>10</sub>	0.1	0.1
SN-148	Modified Line Sand Delivery Storage Silo #1	Emissions routed to SN-908		
SN-149	Modified Line Sand Delivery Storage Silo #2	Emissions routed to SN-909		
SN-150	Modified Line Sand/Granule Reclaim System	PM <sub>10</sub>	0.1	0.1
SN-151	Modified Line Talc Bag Dumping Bin	Emissions routed to SN-910		
SN-152	Modified Line Talc Screw Conveyor	Emissions routed to SN-910		

GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

SN	Description	Pollutant	lb/hr	tpy
	and Bucket Elevator			
SN-153	Modified Line Talc Storage Silo	Emissions routed to SN-910		
SN-154	Modified Line Filler Delivery System and Storage Silo	Emissions routed to SN-911		
SN-156	Modified Line SBS Flux Storage Tank	PM <sub>10</sub>	0.8	0.6
		CO	0.2	0.2
		VOC	1.2	*
SN-159	Modified Line APP Flux Storage Tank	PM <sub>10</sub>	1.3	1.5
		CO	0.2	0.2
		VOC	2.0	*
		SO <sub>2</sub>	0.3	0.3
SN-161	Modified Line IPP Polymer Storage Hopper #1	Emissions routed to SN-914		
SN-162	Modified Line IPP Polymer Storage Hopper #2	Emissions routed to SN-914		
SN-163	Modified Line SBS Polymer Storage Hopper	Emissions routed to SN-914		
SN-164	Modified Line Compound Mixer (5 mixers)	Emissions routed to SN-912		
SN-165	Modified Line Dry Chemical Storage Tank #1	Emissions routed to SN-913		
SN-166	Modified Line Dry Chemical Storage Tank #2	Emissions routed to SN-913		
SN-167	Modified Line Dry Chemical Storage Tank #3	Emissions routed to SN-913		
SN-168	Modified Line Surge Bins (5 Bins)	Emissions routed to SN-913		
SN-175	Gasoline Storage Tank	VOC	2.5	*
SN-178	Parts Washers	VOC	12.0	*
SN-179	Granule Transfer Systems	PM <sub>10</sub>	0.3	1.1
SN-182	Reflective Coating Applicator and Curing	VOC	135.0	*
SN-183	Natural Gas-fired Infrared Dryer 4.1 MM Btu/hr	PM <sub>10</sub>	0.1	0.2
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	*
		CO	0.4	1.5
		NO <sub>x</sub>	0.4	1.8
SN-901	Roofing Line High Energy Air Filter	PM <sub>10</sub>	7.5	3.6
		CO	1.8	1.8
		VOC	27.5	*
SN-902	Roofing Line Ceco Filter	PM <sub>10</sub>	3.2	3.3

GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

SN	Description	Pollutant	lb/hr	tpy
		CO	2.7	2.3
		VOC	15.7	*
SN-903	Roofing Line Hot Filler System Baghouse	PM <sub>10</sub>	2.2	5.5
		CO	0.3	0.3
		VOC	13.5	*
SN-904	Roofing Line Sand Storage Baghouse	PM <sub>10</sub>	0.3	1.0
SN-905	Roofing Line Sand Silo Baghouse	PM <sub>10</sub>	0.2	0.7
SN-906	Roofing Line Surfacing/Granule Reclaim System Baghouse	PM <sub>10</sub>	4.4	20.1
SN-907	Modified Line Monsanto Coalescing Filter	PM <sub>10</sub>	4.3	7.4
		CO	1.1	1.5
		VOC	7.9	*
		SO <sub>2</sub>	0.1	0.1
SN-908	Modified Line Sand Silo #1 Baghouse	PM <sub>10</sub>	0.2	0.9
SN-909	Modified Line Sand Silo #2 Baghouse (Passive)	PM <sub>10</sub>	0.2	0.7
SN-910	Modified Line Talc System Baghouse	PM <sub>10</sub>	0.4	1.4
SN-911	Modified Line Filler System Baghouse	PM <sub>10</sub>	0.2	0.8
SN-912	Modified Line Compound Mixing Room	PM <sub>10</sub>	0.8	3.4
		CO	0.1	0.1
		VOC	1.0	*
		SO <sub>2</sub>	0.1	0.1
SN-913	Modified Line Dry Chemical Storage Tanks Baghouse	PM <sub>10</sub>	0.2	0.8
SN-914	Modified Line IPP/SBS Baghouse (Passive)	PM <sub>10</sub>	0.1	0.4

\* Plantwide VOC annual emissions limit.

2. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 18, §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
SN-101	Roofing Line Saturator	Emissions routed to SN-901		

GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

SN	Description	Pollutant	lb/hr	tpy
SN-102	Roofing Line Pre-Coater	Emissions routed to SN-901		
SN-103	Roofing Line Coater	Emissions routed to SN-902		
SN-104 SN-105	Roofing Line Surfacing Section Roofing Line Cooling Section	PM (SN-104)	0.3	1.0
		PM (SN-105)	15.8	9.0
		<i>Formaldehyde</i>	0.05	0.06
		<i>Carbonyl Sulfide</i>	0.05	0.05
		<i>Toluene</i>	0.04	0.04
SN-106	Roofing Line Laying Line Applicator	<i>HAPs</i>	0.25	5.0*
SN-107	Roofing Line Ink Jet Label Applicator	<i>HAPs</i>	0.76	*
SN-109	Roofing Line Filler Delivery and Storage Silo	Emissions routed to SN-903		
SN-110	Roofing Line Filler Heater	Emissions routed to SN-903		
SN-111	Roofing Line Hot Filler Elevator	Emissions routed to SN-903		
SN-112	Roofing Line Hot Filler Use Bin	Emissions routed to SN-903		
SN-113	Roofing Line Horizontal Mixer	Emissions routed to SN-903		
SN-114	Roofing Line Vertical Mixer	Emissions routed to SN-902		
SN-116	Roofing Line Pre-Coater Use Tank	Emissions routed to SN-901		
SN-117	Roofing Line Coating Storage Tank	Emissions routed to SN-902		
SN-118	Roofing Line SBS Modified Asphalt Storage Tank	PM	1.1	0.2
		<i>Formaldehyde</i>	0.03	0.01
		<i>Carbonyl Sulfide</i>	0.01	0.01
		<i>Polycyclic Organic Matter (POM**)</i>	0.01	0.01
		<i>1,1,2,2-Tetrachloroethane</i>	0.01	0.01
SN-120	Roofing Line Saturant Storage Tank	Emissions routed to SN-902		
SN-122	Roofing Line Saturant Heater, 7.0 MM Btu/hr	PM	0.1	0.3
SN-123	Roofing Line Sand Delivery	Emissions routed to SN-905		

GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

SN	Description	Pollutant	lb/hr	tpy
	and Storage Silo			
SN-124	Roofing Line Sand Transfer Storage Bin	Emissions routed to SN-904		
SN-125	Roofing Line Sand Use Bin	Emissions routed to SN-906		
SN-126	Granule Delivery and Storage Silos	PM	0.1	0.1
SN-127	Granule Use Bin	Emissions routed to SN-906		
SN-128	Roofing Line Sand/Granule Reclaim System	Emissions routed to SN-906		
SN-130	Modified Line Ink Jet Applicator	HAPs	0.76	*
SN-131	Modified Line Pre-Coater	Emissions routed to SN-907		
SN-132	Modified Line Coater	Emissions routed to SN-907		
SN-133	Modified Line Granule Surfacing Applicator #1	PM (SN-133 and SN-134)	0.2	0.6
SN-134	Modified Line Granule Surfacing Applicator #2			
SN-135	Modified Line Back Surfacing Applicator #1	PM(SN-135 and SN-136)	0.2	0.6
SN-136	Modified Line Back Surfacing Applicator #2			
SN-137	Modified Line Cooling Section Water Bath	PM (SN-137)	4.7	7.9
		Formaldehyde	0.05	0.08
		Carbonyl Sulfide	0.04	0.07
		Toluene	0.03	0.06
SN-140	Modified Line Laying Line Applicator	HAPs	0.25	*
SN-142	Modified Line Pre-Coater Storage Tank	PM	0.4	0.2
		Formaldehyde	0.02	0.01
		Carbonyl Sulfide	0.01	0.01
		POM**	0.01	0.01
SN-144	Modified Line Pre-Coater Use Tank	PM	0.4	0.2
		Formaldehyde	0.02	0.01



GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

SN	Description	Pollutant	lb/hr	tpy
		<i>Carbonyl Sulfide</i>	0.01	0.01
		<i>POM**</i>	0.01	0.01
SN-145	Modified Line Vertical Mixer	Emissions routed to SN-907		
SN-146	Modified Line Granule Storage Bin	PM	0.1	0.1
SN-147	Modified Line Granule Use Bin	PM	0.1	0.1
SN-148	Modified Line Sand Delivery Storage Silo #1	Emissions routed to SN-908		
SN-149	Modified Line Sand Delivery Storage Silo #2	Emissions routed to SN-909		
SN-150	Modified Line Sand/Granule Reclaim System	PM	0.1	0.1
SN-151	Modified Line Talc Bag Dumping Bin	Emissions routed to SN-910		
SN-152	Modified Line Talc Screw Conveyor and Bucket Elevator	Emissions routed to SN-910		
SN-153	Modified Line Talc Storage Silo	Emissions routed to SN-910		
SN-154	Modified Line Filler Delivery System and Storage Silo	Emissions routed to SN-911		
SN-156	Modified Line SBS Flux Storage Tank	PM	0.8	0.6
		<i>Formaldehyde</i>	0.02	0.01
		<i>Carbonyl Sulfide</i>	0.01	0.01
		<i>POM**</i>	0.01	0.01
		<i>1,1,2,2-Tetrachloroethane</i>	0.01	0.01
SN-159	Modified Line APP Flux Storage Tank	PM	1.3	1.5
		<i>Formaldehyde</i>	0.13	0.15
		<i>Carbonyl Sulfide</i>	0.01	0.01
		<i>POM**</i>	0.01	0.01
		<i>Benzene</i>	0.16	0.19
		<i>Ethylidene Dichloride</i>	0.04	0.05

GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

SN	Description	Pollutant	lb/hr	tpy
		<i>Propionaldehyde</i>	0.18	0.21
SN-161	Modified Line IPP Polymer Storage Hopper #1	Emissions routed to SN-914		
SN-162	Modified Line IPP Polymer Storage Hopper #2	Emissions routed to SN-914		
SN-163	Modified Line SBS Polymer Storage Hopper	Emissions routed to SN-914		
SN-164	Modified Line Compound Mixer (5 mixers)	Emissions routed to SN-912		
SN-165	Modified Line Dry Chemical Storage Tank #1	Emissions routed to SN-913		
SN-166	Modified Line Dry Chemical Storage Tank #2	Emissions routed to SN-913		
SN-167	Modified Line Dry Chemical Storage Tank #3	Emissions routed to SN-913		
SN-168	Modified Line Surge Bins (5 Bins)	Emissions routed to SN-913		
SN-179	Granule Transfer Systems	PM	0.3	1.1
SN-182	Reflective Coating Applicator and Curing	Ammonia	0.4	1.4
SN-183	Natural Gas-fired Infrared Dryer 4.1 MM Btu/hr	PM	0.1	0.2
SN-901	Roofing Line High Energy Air Filter	PM	7.5	3.6
		<i>Formaldehyde</i>	0.18	0.18
		<i>Carbonyl Sulfide</i>	0.16	0.16
		<i>POM**</i>	0.05	0.02
		<i>Toluene</i>	0.07	0.07
SN-902	Roofing Line Ceco Filter	PM	3.2	3.3
		<i>Formaldehyde</i>	0.28	0.26
		<i>Carbonyl Sulfide</i>	0.21	0.18
		<i>POM**</i>	0.01	0.01
		<i>Toluene</i>	0.07	0.08

SN	Description	Pollutant	lb/hr	tpy
SN-903	Roofing Line Hot Filler System Baghouse	PM	2.2	5.5
		<i>Formaldehyde</i>	0.30	0.33
		<i>Carbonyl Sulfide</i>	0.05	0.06
SN-904	Roofing Line Sand Storage Baghouse	PM	0.3	1.0
SN-905	Roofing Lien Sand Silo Baghouse	PM	0.2	0.7
SN-906	Roofing Line Surfacing/Granule Reclaim System Baghouse	PM	4.4	20.1
SN-907	Modified Line Monsanto Coalescing Filter	PM	4.3	7.4
		<i>Formaldehyde</i>	0.16	0.24
		<i>Carbonyl Sulfide</i>	0.11	0.15
		<i>Toluene</i>	0.09	0.12
SN-908	Modified Line Sand Silo #1 Baghouse (Passive)	PM	0.2	0.9
SN-909	Modified Line Sand Silo #2 Baghouse (Passive)	PM	0.2	0.7
SN-910	Modified Line Talc System Baghouse	PM	0.4	1.4
SN-911	Modified Line Filler System Baghouse	PM	0.2	0.8
SN-912	Modified Line Compound Mixing Room Baghouse	PM	0.8	3.4
		<i>Formaldehyde</i>	0.04	0.07
		<i>Carbonyl Sulfide</i>	0.01	0.01
SN-913	Modified Line Dry Chemical Storage Tanks Baghouse	PM	0.2	0.8
SN-914	Modified Line IPP/SBS Baghouse (Passive)	PM	0.1	0.4

*Italics* - indicates all Hazardous Air Pollutants (HAPs)

- \* Five-source (SN-106, SN-107, SN-130, SN-140, and SN-178) annual emissions bubble.
- \*\* Include emissions of 2-methyl naphthalene, phenanthrene, and acenaphthalene.

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

SN	Limit	Regulatory Citation
122	20%	19.503
104, 105, 106, 107, 118, 126, 130, 133, 134, 135, 136, 137, 140, 142, 146, 147, 150, 156, 159, 175, 178, 179, 182, 183, 903, 904, 905, 906, and 912.	5%	18.501
901	20%	19.503
902 – when SN-103 is operating.	20%	19.503
- when SN-103 is not operating, and SN-120 is operating.	0%	60.472(c)
907 – when SN-131 and SN-132 are operating.	20%	60.472(a)(2)
- when SN-131 and SN-132 are not operating, and SN-145 is operating.	0%	60.472(c)
144	0%	40 CFR Part 60.472(c)
908, 909, 910, 911, and 913.	1%	40 CFR Part 60.472(d)

4. The facility shall not exceed the following rolling twelve month total for the following materials: [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Material	Permitted Twelve Month Rolling Total
Asphalt (Facility-wide Total)	89,045 tons
Saturant (Facility-wide Total)	5,608 tons
Modified Line Roofing Material Production	80,810 tons

5. The permittee shall not use materials which exceed the VOC and ammonia content limits outlined in the following table: [Regulation 19, and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Material	Maximum VOC Content Limit (lb/gallon)	Maximum Ammonia Content Limit (lb/gallon)
Paints used at SN-106 and SN-140	2.0	N/A
Inks used at SN-107 and SN-130		
Parts Washer Solvents used at SN-178	8.0	
Coating used at SN-182	0.5	0.004

6. The permittee shall not emit in excess of 95.5 tpy of VOC at the facility during any consecutive 12 months period. Compliance with this condition shall be demonstrated by compliance with Specific Condition #7. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
7. The permittee shall calculate and maintain records of the VOC emissions from the facility during each month. A 12-month rolling total and each individual month's data shall be updated on a monthly basis by the 15<sup>th</sup> of each month. These records shall be kept on site and provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
8. The permittee shall perform monthly emission calculations using mass balance to demonstrate compliance with the annual emission limits set forth in Specific Condition #2 for SN-106, SN-107, SN-130, SN-140, and SN-178. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
9. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition # 4, #5, and #8. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
10. The permittee may use materials that contain a HAP with TLV greater than 6 mg/m<sup>3</sup> at SN-106, SN-107, SN-130, and SN-140 at 100% weight content. For materials containing a HAP with a TLV lower than 6 mg/m<sup>3</sup>, the permittee shall not exceed the Hazardous Air Pollutant (HAP) content limits set forth in the following table at SN-106, SN-107, SN-130, and SN-140.

TLV greater than or equal to (mg/m <sup>3</sup> )	Maximum Allowable Weight Content (Wt %)
4.995	90
4.44	80

TLV greater than or equal to (mg/m <sup>3</sup> )	Maximum Allowable Weight Content (Wt %)
3.885	70
3.33	60
2.77	50
2.22	40
1.665	30
1.11	20
0.55	10

11. The permittee shall maintain records which demonstrate compliance with the limits set in Specific Condition #10, and which may be used by the Department for enforcement purposes. Compliance shall be determined by inspecting the American Conference of Governmental Industrial Hygienists (ACGIH) TLV values as listed on current MSDS forms, or in the most recently published ACGIH handbook of Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs), and properly noting on the monthly HAP records (required by Specific Condition #10) whether the material in question is compliant with the table contained in Specific Condition #10. These records shall be maintained on site and shall be provided to Department personnel upon request. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
  
12. The permittee shall maintain monthly records of the HAP emissions from SN-106, SN-107, SN-130, and SN-140 in order to demonstrate compliance with tons per year emission limits. All HAPs that are capable of being emitted as air emissions and are contained in materials issued for use at SN-103, SN-104, SN-130, and SN-140 shall be considered to be emitted. A 12-month rolling total and each individual month's data shall be maintained on a facility-wide basis. These records shall be maintained on site and shall be made available to Department upon request. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
  
13. The permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
  
14. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [Regulation 18, §18.901 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
  
15. The facility shall use only pipeline quality natural gas or propane for the process heaters. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

16. The permittee shall test SN-901 and SN-902 to determine compliance with the particulate matter lb/hr emission rate using EPA Reference Method 5A within 120 days after the issuance of this permit. At least one compliance test shall be conducted every five calendar years. There shall be no more than sixty-two months between any two compliance tests. The 5-year testing cycle shall commence with the initial compliance stack testing event. [Regulation 19, §19.702, Regulation 18, §18.1002, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
17. The Roofing Line High Energy Air Filter (SN-901) and Roofing Line Ceco Filter (SN-902) shall be kept in good working condition at all times and shall meet the conditions shown in the following table. Cooling chamber at SN-901 shall be in operation when the Roofing Line High Energy Air Filter is operating. The monitoring parameters for SN-901 and SN-902 shall be measured and recorded weekly. The results shall be kept on site, updated by the last day of the following month, and be available to Department personnel upon request.

SN	Description	Parameter	Units	Operation Limits
901	Roofing Line High Energy Air Filter	Gas Pressure Drop Across Unit	in. H <sub>2</sub> O	12 (minimum) 28 (maximum)
902	Roofing Line Ceco Filter	Gas Pressure Drop Across Unit	in. H <sub>2</sub> O	3.0 (minimum) 15 (maximum)

[Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

### NSPS Requirements

18. The equipment shown in the following table shall meet all applicable requirements of NSPS Subpart UU, Standards of Performance for Asphalt Processing and Asphalt Manufacture. A copy of NSPS Subpart UU is attached as Appendix A. [Regulation 19, §19.304 and 40 CFR §60.470]

Source Number	Source Description	Affected Facility Type
SN-120	Roofing Line Saturant Tank	Asphalt Storage Tank
SN-131	Modified Line Pre-Coater	Saturator
SN-132	Modified Line Coater	Saturator
SN-144	Modified Line Pre-coater Use Tank	Asphalt Storage Tank
SN-145	Modified Line Vertical Mixer	Asphalt Storage Tank
SN-148	Modified Line Sand Delivery Storage Silo #1	Mineral Handling and Storage Facility
SN-149	Modified Line Sand Delivery Storage Silo #2	Mineral Handling and Storage Facility

Source Number	Source Description	Affected Facility Type
SN-151	Modified Line Talc Bag Dumping Bin	Mineral Handling and Storage Facility
SN-152	Modified Line Talc Screw Conveyor and Bucket Elevator	Mineral Handling and Storage Facility
SN-153	Modified Line Talc Storage Silo	Mineral Handling and Storage Facility
SN-154	Modified Line Filler Delivery System and Storage Silo	Mineral Handling and Storage Facility
SN-165	Modified Line Dry Chemical Storage Tank #1	Mineral Handling and Storage Facility
SN-166	Modified Line Dry Chemical Storage Tank #2	Mineral Handling and Storage Facility
SN-167	Modified Line Dry Chemical Storage Tank #3	Mineral Handling and Storage Facility

19. The permittee shall not discharge in excess of 0.08 lb particulate matter per ton of asphalt shingle, mineral-surfaced roll roofing, saturated felt, or smooth surfaced roll roofing produced from SN-131 and SN-132. Compliance with the emission factor limits will be demonstrated by compliance with Specific Condition # 20. [Regulation 19, §19.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §60.472]
20. The permittee shall test SN-131 and SN-132 to determine compliance with the particulate matter standards of §60.472(a)(1) using EPA Reference Method 5A. Method 5A testing shall be conducted at the outlet of Modified Line Monsanto Coalescing Filter (SN-907). Additionally, the permittee shall measure the inlet gas temperature to SN-907 during the stack test. The control device temperature during testing must be recorded, reported, and maintained on file in accordance with General Condition #5. At least one compliance test shall be conducted every five calendar years. There shall be no more than sixty-two months between any two compliance tests. The 5-year testing cycle shall commence with the initial compliance stack testing event. [Regulation 19, §19.702, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR §60.8, and 40 CFR §60.474]
21. The permittee shall continuously monitor and record the inlet gas temperature of SN-907. The temperature range shall be maintain within the measured value during the stack testing. The temperature monitoring instrument shall have an accuracy of  $\pm 15^{\circ}\text{C}$  ( $\pm 25^{\circ}\text{F}$ ) over its range. These records shall be kept on site, updated by the last day of the following month, and provided to Department personnel upon request. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §60.473 (a)]
22. The permittee shall not cause to be discharged into the atmosphere any visible emission from the Modified Line Monsanto Coalescing Filter's capture system for more than 20



GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

percent of any period of consecutive valid observation totaling 60 minutes. Compliance with these visible emission limits will be demonstrated by compliance with Specific Condition # 18. [Regulation 19, §19.501, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §60.472]

23. The permittee shall test the Modified Line Monsanto Coalescing Filter's capture system to determine compliance with the particulate matter standards of §60.472(a)(3) using EPA Reference Method 22, modified so that readings are recorded every 15 seconds for a period of consecutive observations during representative conditions in accordance with §60.8(c) totaling 60 minutes. Performance tests shall consist of only one run. At least one compliance test shall be conducted every five calendar years. There shall be no more than sixty-two months between any two compliance tests. The 5-year testing cycle shall commence with the initial compliance stack testing event. [Regulation 19, §19.702, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR §60.8, and 40 CFR §60.474]
24. Visible emissions testing for the affected facilities in the following table shall be conducted using EPA Reference Method 9 in accordance with the schedule specified by 40 CFR §60.8. [Regulation 19, §19.304 and 40 CFR §60.474]

Affected Facility Source Number	Affected Facility Description	Testing Location	Opacity Limit	Regulatory Citation	
SN-131	Modified Line Pre-Coater	Outlet of SN-907	20%	§60.472(a)(2)	
SN-132	Modified Line Coater				
SN-120	Roofing Line Saturant Tank	Outlet of SN-902	0%*	§60.472(c)	
SN-120	Roofing Line Saturant Tank	Outlet of SN-902	20%*		
SN-144	Modified Line Pre-coater Use Tank	Outlet of tank	0%		
SN-145	Modified Line Vertical Mixer	Outlet of SN-907	0%**		
SN-145	Modified Line Vertical Mixer	Outlet of SN-907	20%**		
SN-148	Modified Line Sand Delivery Storage Silo #1	Outlet of SN-908	1%		§60.472(d)
SN-149	Modified Line Sand Delivery Storage Silo #2	Outlet of SN-909	1%		
SN-151	Modified Line Talc Bag Dumping Bin	Outlet of SN-910	1%		
SN-152	Modified Line Talc Screw Conveyor and Bucket	Outlet of SN-910	1%		

GS Roofing Products Company  
 Permit #: 1145-AR-5  
 AFIN: 60-00049

Affected Facility Source Number	Affected Facility Description	Testing Location	Opacity Limit	Regulatory Citation
	Elevator			
SN-153	Modified Line Talc Storage Silo	Outlet of SN-910	1%	
SN-154	Modified Line Filler Delivery System and Storage Silo	Outlet of SN-911	1%	
SN-165	Modified Line Dry Chemical Storage Tank #1	Outlet of SN-913	1%	
SN-166	Modified Line Dry Chemical Storage Tank #2	Outlet of SN-913	1%	
SN-167	Modified Line Dry Chemical Storage Tank #3	Outlet of SN-913	1%	

\* SN-120 is subject to zero percent opacity when SN-103 is not operating. SN-120 is subject to twenty percent opacity when SN-103 is operating.

\*\* SN-145 is subject to zero percent opacity when SN-131 and SN-132 are not operating. SN-145 is subject to twenty percent opacity when SN-131 and SN-132 are operating.

25. The permittee shall report the findings of all visible emissions tests to the Department in accordance with General Condition #7. [Regulation 19, §19.705, Regulation 18, §18.1004, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

**SECTION V: INSIGNIFICANT ACTIVITIES**

The following types of activities or emissions are deemed insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated December 21, 2005.

Description		Category
SN-108	Roofing Line Shrink Wrap	A-13
SN-115	Coating Asphalt Heater, 3.5 MM Btu/hr	A-1
SN-119	Roofing Line SBS Modified Asphalt Storage Tank Heater, 0.8 MM Btu/hr	A-1
SN-121	Roofing Line Saturant Storage Tank and Heater, 2.5 MM Btu/hr	A-1
SN-138	Modified Line Backing Film Applicator	A-13
SN-139	Modified Line Sheet Edge Flame Shrinking, 0.03 MM Btu/hr	A-1
SN-141	Modified Line Shrink Wrap	A-13
SN-143	Modified Line Pre-Coater Storage Tank Heater, 0.8 MM Btu/hr	A-1
SN-157	Modified Line SBS Flux Storage Tank Electric Heater	A-13
SN-158	Hot Oil Heater, 6.0 MM Btu/hr	A-1
SN-160	Modified Line APP Flux Storage Tank Heater, 0.8 MM Btu/hr	A-1
SN-180	Modified Line Sheet Splicing, 0.06 MM Btu/hr	A-1
SN-174	1,500 gallon Diesel Tank	A-3
SN-176	Kerosene Storage Tank	A-3
SN-155	Modified Line APP Polymer Storage Tank	A-3
SN-173	Modified Line Teckifier Resin Storage Tank	B-21
SN-177	Soap Mixed Tank	B-21
SN-181	Soap Mixed Tank	B-21

## SECTION VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
3. The permittee will notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [Regulation 19, §19.704 and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [Regulation 19, §19.410(B) and/or Regulation 18, §18.309(B) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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

7. The permittee will test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) days after the completion of testing. [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
8. The permittee will provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. Sampling ports adequate for applicable test methods
  - b. Safe sampling platforms
  - c. Safe access to sampling platforms
  - d. Utilities for sampling and testing equipment
9. The permittee will operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee will maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [Regulation 19, §19.303 and/or Regulation 18, §18.1104 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [Regulation 19, §19.601 and/or Regulation 18, §18.1101 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.

- b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
    - c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.
11. The permittee shall allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
  - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act;
  - c. To inspect any monitoring equipment or monitoring method required in this permit;
  - d. To sample any emission of pollutants; and
  - e. To perform an operation and maintenance inspection of the permitted source.
12. The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [Regulation 19, §19.410(A) and/or Regulation 18, §18.309(A) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated '8 1 106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [Regulation 19, §19.407(B) and/or

GS Roofing Products Company

Permit #: 1145-AR-5

AFIN: 60-00049

Regulation 18, §18.307(B) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]

**GS Roofing Products Company**  
**Permit #: 1145-AR-3**  
**CSN: 60-0049**



**GS Roofing Products Company**  
**Permit #: 1145-AR-3**  
**CSN: 60-0049**

**APPENDIX A**  
**40 C.F.R. Part 60 Subpart UU**  
**Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture**