

ADEQ MINOR SOURCE AIR PERMIT

Permit #: 1145-AR-6

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

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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 _x | Nitrogen Oxide |
| PM | Particulate Matter |
| PM ₁₀ | Particulate Matter Smaller Than Ten Microns |
| SO ₂ | 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-6

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. This permit modification authorizes the removal of the Roofing Line Saturator (SN-101) and the removal of the High Energy Air Filter (SN-901). Emissions from Roofing Line Pre-coater (SN-102) and Roofing Line Pre-coater Use Tank (SM-116) that are currently routed to SN-901 are rerouted to the Ceco Filter (SN-902). As the result of the removal of SN-901, the testing requirement associated with this source has been removed. Permitted emission decreases are 0.9 tpy of PM/PM₁₀, and 0.2 tpy of CO. The plant-wide limit of VOC remains at 95.5 tpy.

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 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

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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.

Air emissions from Pre-coater (SN-102), Roofing Line Pre-Coater Use Tank (SN-116) are routed to SN-902, Roofing Line Ceco 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 also 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-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 a series of idlers. The mat becomes saturated as it passes through the pre-coater submerged in hot

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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 Modified Line Vertical Mixer (SN-145) are routed to SN-907, Modified Line Monsanto

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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 SN-181). 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 May 28, 2006. |
| New Source Performance Standards (NSPS) Part 60, Subpart UU, <i>Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture.</i> |

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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 | 44.3 | 73.0 |
| PM ₁₀ | 44.3 | 73.0 |
| SO ₂ | 1.0 | 1.8 |
| VOC | 229.4 | 95.5 |
| CO | 8.8 | 14.8 |
| NO _x | 2.6 | 11.4 |
| Ammonia | 0.4 | 1.4 |
| <i>Formaldehyde</i> | 1.22 | 1.37 |
| <i>Carbonyl Sulfide</i> | 0.66 | 0.70 |
| <i>Polycyclic Organic Matter*</i> | 0.07 | 0.07 |
| <i>HAPs**</i> | 2.02 | 5.0 |
| <i>Benzene</i> | 0.16 | 0.19 |
| <i>Toluene</i> | 0.31 | 0.40 |
| <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.

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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 PM₁₀, 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.

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Air Permit 1145-AR-5 was issued on May 12, 2006. This permit modification authorized the installation and operation of a new reflective coating process line. The process equipment included a natural gas-fired infrared dryer (SN-183), and a reflective coating applicator (SN-182). A plant-wide limit of 95.5 tpy of VOC was maintained.

SECTION IV: EMISSION UNIT INFORMATION

Specific Conditions

- The permittee shall not exceed the emission rates set forth in the following table. [Regulation 19, §19.501 et seq., effective May 28, 2006 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 | Source Removed | | |
| SN-102 | Roofing Line Pre-Coater | Emissions routed to SN-902 | | |
| SN-103 | Roofing Line Coater | Emissions routed to SN-902 | | |
| SN-104 | Roofing Line Surfacing Section | PM ₁₀ | 0.3 | 1.0 |
| SN-105 | Roofing Line Cooling Section | PM ₁₀ | 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-902 | | |
| SN-117 | Roofing Line Coating Storage Tank | Emissions routed to SN-902 | | |
| SN-118 | Roofing Line SBS Modified Asphalt Storage Tank | PM ₁₀ | 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 ₁₀ | 0.1 | 0.3 |
| | | SO ₂ | 0.2 | 0.6 |
| | | VOC | 0.1 | * |
| | | CO | 0.6 | 2.6 |
| | | NO _x | 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 | | |

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| SN | Description | Pollutant | lb/hr | tpy |
|--------|---|----------------------------|-------|-----|
| SN-125 | Roofing Line Sand Use Bin | Emissions routed to SN-906 | | |
| SN-126 | Granule Delivery and Storage Silos | PM ₁₀ | 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 ₁₀ | 0.2 | 0.6 |
| SN-134 | Modified Line Granule Surfacing Applicator #2 | PM ₁₀ | | |
| SN-135 | Modified Line Back Surfacing Applicator #1 | PM ₁₀ | 0.2 | 0.6 |
| SN-136 | Modified Line Back Surfacing Applicator #2 | PM ₁₀ | | |
| SN-137 | Modified Line Cooling Section Water Bath | PM ₁₀ | 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 ₁₀ | 0.4 | 0.2 |
| | | CO | 0.2 | 0.1 |
| | | VOC | 1.0 | * |
| SN-144 | Modified Line Pre-Coater Use Tank | PM ₁₀ | 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 ₁₀ | 0.1 | 0.1 |
| SN-147 | Modified Line Granule Use Bin | PM ₁₀ | 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 ₁₀ | 0.1 | 0.1 |
| SN-151 | Modified Line Talc Bag Dumping Bin | Emissions routed to SN-910 | | |

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| SN | Description | Pollutant | lb/hr | tpy |
|--------|---|----------------------------|-------|-----|
| 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 ₁₀ | 0.8 | 0.6 |
| | | CO | 0.2 | 0.2 |
| | | VOC | 1.2 | * |
| SN-159 | Modified Line APP Flux Storage Tank | PM ₁₀ | 1.3 | 1.5 |
| | | CO | 0.2 | 0.2 |
| | | VOC | 2.0 | * |
| | | SO ₂ | 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 ₁₀ | 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 ₁₀ | 0.1 | 0.2 |
| | | SO ₂ | 0.1 | 0.1 |
| | | VOC | 0.1 | * |
| | | CO | 0.4 | 1.5 |
| | | NO _x | 0.4 | 1.8 |
| SN-901 | Roofing Line High Energy Air Filter | Source Removed | | |
| SN-902 | Roofing Line Ceko Filter | PM ₁₀ | 4.7 | 6.0 |
| | | CO | 3.7 | 4.3 |

| SN | Description | Pollutant | lb/hr | tpy |
|--------|---|------------------|-------|------|
| | | VOC | 21.5 | * |
| SN-903 | Roofing Line Hot Filler System Baghouse | PM ₁₀ | 2.2 | 5.5 |
| | | CO | 0.3 | 0.3 |
| | | VOC | 13.5 | * |
| SN-904 | Roofing Line Sand Storage Baghouse | PM ₁₀ | 0.3 | 1.0 |
| SN-905 | Roofing Line Sand Silo Baghouse | PM ₁₀ | 0.2 | 0.7 |
| SN-906 | Roofing Line Surfacing/Granule Reclaim System Baghouse | PM ₁₀ | 4.4 | 20.1 |
| SN-907 | Modified Line Monsanto Coalescing Filter | PM ₁₀ | 4.3 | 7.4 |
| | | CO | 1.1 | 1.5 |
| | | VOC | 7.9 | * |
| | | SO ₂ | 0.1 | 0.1 |
| SN-908 | Modified Line Sand Silo #1 Baghouse | PM ₁₀ | 0.2 | 0.9 |
| SN-909 | Modified Line Sand Silo #2 Baghouse (Passive) | PM ₁₀ | 0.2 | 0.7 |
| SN-910 | Modified Line Talc System Baghouse | PM ₁₀ | 0.4 | 1.4 |
| SN-911 | Modified Line Filler System Baghouse | PM ₁₀ | 0.2 | 0.8 |
| SN-912 | Modified Line Compound Mixing Room | PM ₁₀ | 0.8 | 3.4 |
| | | CO | 0.1 | 0.1 |
| | | VOC | 1.0 | * |
| | | SO ₂ | 0.1 | 0.1 |
| SN-913 | Modified Line Dry Chemical Storage Tanks Baghouse | PM ₁₀ | 0.2 | 0.8 |
| SN-914 | Modified Line IPP/SBS Baghouse (Passive) | PM ₁₀ | 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 | Source Removed | | |

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| SN | Description | Pollutant | lb/hr | tpy |
|------------------|---|--|-------|------|
| SN-102 | Roofing Line Pre-Coater | Emissions routed to SN-902 | | |
| 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-902 | | |
| 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 | | |

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| 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 |

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| 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 |

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| 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 | Source Removed | | |
| SN-902 | Roofing Line Ceko Filter | PM | 4.7 | 6.0 |
| | | <i>Formaldehyde</i> | 0.40 | 0.40 |
| | | <i>Carbonyl Sulfide</i> | 0.31 | 0.31 |
| | | <i>POM**</i> | 0.02 | 0.02 |
| | | <i>Toluene</i> | 0.15 | 0.18 |
| 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 | PM | 0.3 | 1.0 |

| SN | Description | Pollutant | lb/hr | tpy |
|--------|--|--|-----------------------------|-----------------------------|
| | Baghouse | | | |
| 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 <i>Formaldehyde</i> <i>Carbonyl Sulfide</i> <i>Toluene</i> | 4.3 0.16 0.11 0.09 | 7.4 0.24 0.15 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 <i>Formaldehyde</i> <i>Carbonyl Sulfide</i> | 0.8 0.04 0.01 | 3.4 0.07 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]

| SN | Limit | Regulatory Citation |
|-----|-------|---------------------|
| 122 | 20% | 19.503 |

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| SN | Limit | Regulatory Citation |
|--|-------|-----------------------|
| 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]

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| 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 15th 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/m³ 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/m³, 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 ³) | Maximum Allowable Weight Content (Wt %) |
|---|---|
| 4.995 | 90 |
| 4.44 | 80 |
| 3.885 | 70 |

| TLV greater than or equal to (mg/m ³) | Maximum Allowable Weight Content (Wt %) |
|---|---|
| 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-902 to determine compliance with the particulate matter lb/hr

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emission rate using EPA Reference Method 5A within 120 days after the issuance of Air Permit 1145-AR-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, 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 Ceco Filter (SN-902) shall be kept in good working condition at all times and shall meet the conditions shown in the following table. The monitoring parameters for 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 |
|-----|--------------------------|-------------------------------|----------------------|-------------------------------|
| 902 | Roofing Line Ceco Filter | Gas Pressure Drop Across Unit | in. H ₂ 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 |
| 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 |

| Source Number | Source Description | Affected Facility Type |
|---------------|---|---------------------------------------|
| 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 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

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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-103 | Roofing Line Coater | Outlet of SN-902 | 20%* | §60.472(c) |
| SN-120 | Roofing Line Saturant Tank | Outlet of SN-902 | 0%* | |
| 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% | |
| 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 Elevator | Outlet of SN-910 | 1% | |
| 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% | |

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| Affected Facility Source Number | Affected Facility Description | Testing Location | Opacity Limit | Regulatory Citation |
|---------------------------------|--|------------------|---------------|---------------------|
| 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 August 21, 2006.

| 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

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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)]

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