Facility Name: Milliken & Company – Live Oak/Milstar Complex

City: LaGrange County: Troup

AIRS #: 04-13-285-00032

Application #: TV-684986

Date Application Received: September 21, 2022

Permit No: 2273-285-0032-V-05-0

| Program                    | Review Engineers | Review Managers |
|----------------------------|------------------|-----------------|
| SSPP                       | Susan Jenkins    | Jeng-Hon Su     |
| ISMU                       | Bob Scott        | Dan McCain      |
| SSCP                       | Gerson Martinez  | Tammy Swindell  |
| Toxics N/A                 |                  | N/A             |
| Permitting Program Manager |                  | Steve Allison   |

#### Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

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### I. Facility Description

## A. Facility Identification

### 1. Facility Name:

Milliken & Company – Live Oak/Milstar Complex

### 2. Parent/Holding Company Name

Milliken & Company

### 2. Previous and/or Other Name(s)

Milliken & Company – Live Oak Complex

## 4. Facility Location

300 Lukken Industrial Drive, West LaGrange, Georgia 30240 (Troup County)

### 5. Attainment, Non-attainment Area Location, or Contributing Area

The facility is located in Troup County, which is considered an attainment area for all criteria pollutants.

#### B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

#### C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

| Permit Number and/or Off- | Date of Issuance/ | Purpose of Issuance                               |
|---------------------------|-------------------|---|
| Permit Change             | Effectiveness     |   |
| 2273-285-0032-V-04-0      | March 26, 2018    | Title V Renewal                                   |
| (App # 42007)             |                   |   |
| Off-Permit Change         | December 15,      | Relocation of a hot melt coater from one location |
| (App # 24071)             | 2016              | to another within the plant.                      |
| Off-Permit Change         | August 7, 2017    | N/A   |
| (App # 26142)             |                   |   |
| , 11                      |                   |   |

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| Permit Number and/or Off- | Date of Issuance/<br>Effectiveness | Purpose of Issuance                               |
|---------------------------|------------------------------------|---|
| Permit Change             |                                    | Installation of Duoduct I shaling Foreignment     |
| Off-Permit Change         | December 21,                       | Installation of Product Labeling Equipment        |
| (App # 26316)             | 2017                               |   |
| 2273-285-0032-V-04-1      | October 10, 2019                   | SAW: Modify "Generic Emission Group" AK01         |
| (App# 329876)             |                                    | by adding a printing operation and finishing      |
|                           |                                    | equipment.  |
| Off-Permit Change         | November 10,                       | Installation of a carpet tile printer             |
| (App # 27720)             | 2020                               |   |
| Off-Permit Change         | November 10,                       | Installation of an IR Oven                        |
| (App # 27722)             | 2020                               |   |
| 2273-285-0032-V-04-2      | March 31, 2021                     | 502(b)(10): Construction and operation of an      |
|                           |                                    | electric infrared (IR) oven to set inks inline on |
|                           |                                    | source PEA, tile pattern range, which is part of  |
|                           |                                    | Generic Emission Group AK01.                      |

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

## D. Process Description

## 1. SIC Codes(s)

2273 – Carpet and Rugs

## 2. Description of Product(s)

The facility produces broadloom carpet, carpet tiles, panels, and area rugs.

## 2. Overall Facility Process Description

The facility operations involve the preparation, dyeing, coating, and finishing of broadloom carpet, rugs, and modular carpet tile. Based on the specific product, required portions of each sub-process can be used in numerous combinations to meet a customer specification. Sub-processes can include dyeing, washing, finishing (including coating), and sizing. Mixing and compounding of coating materials is prepared in mix preparation equipment. The facility operates boilers to provide steam and heat to the process. Natural gas-fired burners are found in certain ranges where direct heat is required.

#### 4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

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### E. Regulatory Status

#### 1. PSD/NSR

This facility is not a major source under PSD because it has potential emissions of regulated NSR pollutants less than 250 tons per year (The facility is not one of the 28 named source categories under PSD). The facility has taken the following PSD Avoidance emissions limits:

- An SO<sub>2</sub> PSD Avoidance limit for the Boilers (ID Nos. VAA, VBA, VCA, and VDA), combined, while combusting fuel oil of less than 249 tons during any consecutive twelvemonth period.
- A facility-wide VOC emissions limit of less than 250 tons during any consecutive twelvemonth period.

## 2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

|                   | Is the                | If emitted, what is the facility's Title V status for the pollutant? |                                      |                            |  |
|-------------------|-----------------------|--|--------------------------------------|----------------------------|--|
| Pollutant         | Pollutant<br>Emitted? | Major Source Status  | Major Source<br>Requesting SM Status | Non-Major Source<br>Status |  |
| PM                | ✓                     |  |                                      | ✓                          |  |
| PM <sub>10</sub>  | ✓                     |  |                                      | ✓                          |  |
| PM <sub>2.5</sub> | ✓                     |  |                                      | ✓                          |  |
| $SO_2$            | ✓                     | ✓  |                                      |                            |  |
| VOC               | ✓                     | ✓  |                                      |                            |  |
| NOx               | ✓                     | ✓  |                                      |                            |  |
| СО                | ✓                     |  |                                      | ✓                          |  |
| TRS               |                       |  |                                      |                            |  |
| H <sub>2</sub> S  |                       |  |                                      |                            |  |
| Individual<br>HAP | ✓                     |  | ✓                                    |                            |  |
| Total HAPs        | ✓                     |  | <b>√</b>                             |                            |  |
| Total GHG         | ✓                     |  |                                      | ✓                          |  |

#### 3. MACT Standards

<u>Major Source NESHAP:</u> The following NESHAPs do not apply to this facility because the facility is regulated as an Area Source of hazardous air pollutants (HAPs):

• 40 CFR 63 Subpart OOOO, "National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles"

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- 40 CFR 63 Subpart KK, "National Emission Standards for the Printing and Publishing Industry"
- 40 CFR 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters"

### **Area Source NESHAP:**

40 CFR 63 Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers: Area Sources" is an applicable requirement for the boilers (ID Nos. VAA, VBA, VCA, and VDA).

4. Program Applicability (AIRS Program Codes)

| Program Code                    | Applicable (y/n) |
|---------------------------------|------------------|
| Program Code 6 – PSD            | No               |
| Program Code 8 – Part 61 NESHAP | No               |
| Program Code 9 – NSPS           | No               |
| Program Code M – Part 63 NESHAP | Yes              |
| Program Code V – Title V        | Yes              |

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### **Regulatory Analysis**

## II. Facility Wide Requirements

### A. Emission and Operating Caps:

<u>PSD Avoidance VOC Emissions Limit:</u> Milliken received Permit No. 2273-285-0032-V-04-1 for authorization to modify existing Generic Emission Group AK01 for printing and finishing by adding a printing operation and finishing equipment. This change results in the facility-wide PTE for VOC emissions to equal or exceed 250 tons per year. To avoid classification as a PSD major source, the facility requested a facility-wide PSD Avoidance limit of 249 tons during any consecutive twelvements for VOC emissions.

<u>Area Source Classification for Individual/Total HAP Emissions:</u> The facility requested a facility-wide single/combined HAP emissions limits of 10/25 during any consecutive twelve-months as part of Permit No. 2273-285-0032-V-04-1.

Avoidance of 40 CFR 60 Subpart VVV: The facility's *polymeric coating* operations on Process Groups EAA, LAA, MAA, RAA, and certain Attachment B sources (AD01, AI01, and AK01 (excluding Excalibur 2 in AK01)) are potentially subject to NSPS VVV. The *polymeric coatings* applied in these Process Groups/sources meet both the exemption in 40 CFR 60.740(d)(2) and the definition of *waterborne coatings* in 40 CFR 60.741.

The existing Title V Permit excludes application of hot melt adhesives and polyurethane from being required to meet the NSPS VVV exemption. Milliken provided substantiation to this exclusion in an email dated December 9, 2022, to the Division and as specified below for the record:

| Hot Melt Adhesive | The adhesive composition is (1) greater than 50% calcium carbonate; and (2) less than 30% polypropylene. Therefore, Milliken does not classify this adhesive as a polymer.  |
|-------------------|---|
| Backing Adhesive  | The vendor indicates that there are no polymers present in significant quantities.  |
| Polyurethane      | The VOC ingredient is a reactant and not a solvent. The EPA determined and documented in Applicability Determination Index (March 20, 2001-Control Number 0300037) that such a coating material is not potentially subject to NSPS VVV. |

The NSPS VVV Avoidance requirement is moved to Section 2 with changes since this avoidance requirement applies to coating operations listed in Section 3 and Attachment B of the Permit. Milliken approved of this change.

#### B. Applicable Rules and Regulations

Not applicable.

#### C. Compliance Status

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The facility does not currently have any noncompliance issues.

## D. Permit Conditions

Condition 2.1.1 from Permit No. V-04-1 is carried over to this updated Title V Renewal Permit establishing the facility-wide VOC emissions for PSD Avoidance purposes.

Condition 2.1.2 from Permit No. V-04-1 is carried over to this updated Title V Renewal Permit establishing the facility-wide 40 CFR 63 Area Source emissions limits for individual/total HAPs.

Condition 2.1.3 (existing Condition 3.2.2) is carried over to this updated Title V Renewal Permit for purposes of NSPS VVV Avoidance for all *polymeric coatings* applied at the facility.

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## III. Regulated Equipment Requirements

## A. Equipment List for the Process

| Emission Units |                             | Applicable Air Pollution |        | tion Control Devices |
|----------------|-----------------------------|--------------------------|--------|----------------------|
| ID No.         | Description                 | Requirements/Standards   | ID No. | Description          |
| VAA            | Low Pressure Boiler #1      | 391-3-102(2)(d)          | N/A    | N/A                  |
|                | (43 MMBtu/hr)               | 391-3-102(2)(g)          |        |                      |
|                | Fires Natural Gas and/or #6 | 40 CFR 63 Subpart A      |        |                      |
|                | Fuel Oil                    | 40 CFR 63 Subpart JJJJJJ |        |                      |
| VBA            | Low Pressure Boiler #2      | 391-3-102(2)(d)          | N/A    | N/A                  |
|                | (43 MMBtu/hr)               | 391-3-102(2)(g)          |        |                      |
|                | Fires Natural Gas and/or #6 | 40 CFR 63 Subpart A      |        |                      |
|                | Fuel Oil                    | 40 CFR 63 Subpart JJJJJJ |        |                      |
| VCA            | High Pressure Boiler #1     | 391-3-102(2)(d)          | N/A    | N/A                  |
|                | (9.99 MMBtu/hr)             | 391-3-102(2)(g)          |        |                      |
|                | Fires Natural Gas and/or #2 | 40 CFR 63 Subpart A      |        |                      |
|                | Fuel Oil                    | 40 CFR 63 Subpart JJJJJJ |        |                      |
| VDA            | High Pressure Boiler #2     | 391-3-102(2)(d)          | N/A    | N/A                  |
|                | (9.99 MMBtu/hr)             | 391-3-102(2)(g)          |        |                      |
|                | Fires Natural Gas and/or #2 | 40 CFR 63 Subpart A      |        |                      |
|                | Fuel Oil                    | 40 CFR 63 Subpart JJJJJJ |        |                      |
| EAA            | Broadloom Finishing         | 391-3-102(2)(b)          | N/A    | N/A                  |
|                | Range 101 (Used to apply    | 391-3-102(2)(e)          |        |                      |
|                | latex & the secondary       | 391-3-102(2)(g)          |        |                      |
|                | backing to the carpet)      |                          |        |                      |
| LAA            | Carpet Backing Formation    | 391-3-102(2)(b)          | N/A    | N/A                  |
|                | Range 703                   | 391-3-102(2)(e)          |        |                      |
|                |                             | 391-3-102(2)(g)          |        |                      |
| MAA            | Carpet Backing Formation    | 391-3-102(2)(b)          | N/A    | N/A                  |
|                | Range 704                   | 391-3-102(2)(e)          |        |                      |
|                |                             | 391-3-102(2)(g)          |        |                      |
| TB01           | Traction Back Machines      | 391-3-102(2)(b)          | N/A    | N/A                  |
|                |                             | 391-3-102(2)(e)          |        |                      |
|                |                             | 391-3-102(2)(g)          |        |                      |
| RAA            | Mixer Group (Units used to  | 391-3-102(2)(b)          | N/A    | N/A                  |
|                | combined raw materials)     | 391-3-102(2)(e)          |        |                      |

#### B. Equipment & Rule Applicability

<u>PSD Avoidance for SO<sub>2</sub> Emissions:</u> The existing limit on SO<sub>2</sub> emissions from Boilers with ID Nos. VAA, VBA, VCA, and VDA at less than 249 tons during any consecutive twelve-month period is carried over to the Title V Renewal Permit.

Avoidance of Georgia Rule 391-3-1-.02(2)(x): Georgia Rule (x) is a potentially applicable requirement because the facility operates coating applicators which apply a coating to a textile substrate with either a roll coater or knife coater at a facility with a VOC PTE of greater than 100 tpy. The potentially applicable ID Nos. for Georgia Rule (x) include EAA, LAA, MAA and TB01 based on the Georgia Rule (x) applicability analysis. Milliken requests the existing Georgia Rule (x) avoidance limit of 100 tons during any consecutive twelve-month period be carried over to the updated Title V Renewal Permit. Note: Process Group ID No. RAA (coating mix preparation group) is not a potentially affected source for Georgia Rule (x) and therefore reference to ID No. RAA is removed.

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Process Group ID No. TB01 (currently listed in Attachment B of the existing Title V Permit) is moved to Section 3 because the coating operation is a potentially affected source under Georgia Rule (x) and therefore reference to ID No. TB01 is added. Per GA Rule 391-3-1-.02(2)6.(i)(I), GA Rule (x) does not apply because the facility is located outside the listed counties and has a VOC PTE from the subject emission units capped below 100 tpy.

Georgia Rule 391-3-1-.02(2)(b), "Visible Emissions": The Ranges (ID Nos. EAA, LAA, and MAA), traction back machine (ID No. TB01), and mixer group (ID No. RAA) are subject to this state rule which limit visible emissions the opacity of which is equal to or greater than 40 percent because these sources are subject to some other emission limitation under Georgia Rule 391-3-1-.02(2).

Georgia Rule 391-3-1-.02(2)(d), "Fuel-Burning Equipment": The Boilers (ID Nos. VAA, VBA, VCA, and VDA) are subject to this state rule. Since these units were constructed after January 1, 1972, the allowable PM emission rate from each boiler is specified by Georgia Rule 391-3-1-.02(2)(d)2. The opacity limit for each boiler is expressed by Georgia Rule 391-3-1-.02(2)(d)3.

Georgia Rule 391-3-1-.02(2)(e), "Particulate Emission from Manufacturing Processes": Each range is treated as a separate process for purposes of applying Georgia Rule (e). The direct fired dryers (in each range) are subject to Georgia Rule (e) rather than Georgia Rule (d). Hence, the coating and drying operations located in each range constitute one Georgia Rule (e) process.

The traction back machine (ID No. TB01), and mixer group (ID No. RAA) are also subject to the GA Rule (e) PM emission limits.

Georgia Rule 391-3-1-.02(2)(g), "Sulfur Dioxide": The fuel-burning sources at the facility (including boilers and process ovens) are subject to Georgia Rule 391-3-1-.02(2)(g)2. which limits fuel sulfur content to less than 2.5 weight percent. This requirement is subsumed by the new requirement that distillate fuel oil combusted in Boilers VCA and VDA shall not contain greater than 0.5 weight percent. Note: The maximum distillate fuel oil sulfur content weight percent limit is 0.5 per Existing Condition 6.2.6.

40 CFR 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units": Boilers with ID Nos. VAA and VBA are not subject to this NSPS because they were constructed and last modified prior to June 9, 1989. Boilers with ID Nos. VCA and VDA are not subject to 40 CFR 60 Subpart Dc because each unit has a maximum heat input capacity of less than 10 MMBtu/hr even though they were constructed after June 9, 1989.

40 CFR 63 Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers: Area Sources": This standard was promulgated on March 21, 2011, and applies to Area Sources of hazardous air pollutants (HAPs) that have boilers that combust coal, biomass, or oil. The facility boilers are considered existing sources under the subpart and do not burn coal; therefore, they are not subject to emission limits under Table 1 of this subpart. They are only subject to the biennial tune-up requirement specified in Item 4. of Table 2 to 40 CFR 63 Subpart JJJJJJ.

Georgia Rule 391-3-1-.02(2)(ccc), "VOC Emissions from Bulk Mixing Tanks": This state rule does not apply to this Process Group because the facility is in Troup County.

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# C. Permit Conditions

| New<br>Condition<br>No. | Existing<br>Condition<br>No. | Changed? | Description   |
|-------------------------|------------------------------|----------|---|
| 3.2.1                   | 3.2.1                        | No       | PSD Avoidance for SO <sub>2</sub> emissions from the boilers while combusting No. 6 fuel oil, distillate oil, or very low sulfur oil.   |
| N/A                     | 3.2.2                        | Yes      | Moved to Section 2 of Permit.   |
| 3.2.2                   | N/A                          | N/A      | Maximum distillate fuel oil sulfur content is limited to less than 0.5 weight percent to be consistent with Existing Condition 6.2.6.   |
| 3.2.3                   | 3.2.3                        | Yes      | VOC emissions limit for avoidance of Georgia Rule (x). Emission Unit TB01 is added while Unit RAA is removed.   |
| 3.3.1                   | 3.3.1                        | No       | Establishes that 40 CFR 63 Subparts A and JJJJJJ are applicable requirements.   |
| 3.3.2                   | N/A                          | New      | 40 CFR 63 Subpart JJJJJJ requirement associated with startup and shutdown periods of the boilers VAA and VBA (Item #1 Table 2.). Boilers VAA and VBA are subject to these work practice standards because they have a maximum heat input capacity greater than 10 MMBtu/hr and are permitted to combust residual fuel oil.  Boilers VCA and VDA are not subject to Item #1 Table 2 because they have a maximum heat input capacity less than 10 MMBtu/hr. |
| 3.4.1                   | 3.4.1                        | No       | Establishes Georgia Rule (b) as an applicable requirement.  |
| 3.4.2a<br>3.4.2b        | 3.4.2                        | No       | Establishes Georgia Rule (d) as an applicable requirement for PM emissions from the boilers.  |
| 3.4.2.c                 | 3.4.3                        | No       | Establishes Georgia Rule (d)3 as an applicable requirement for visible emissions from the boilers.  |
| 3.4.3                   | 3.4.4                        | No       | Establishes Georgia Rule (e) as an applicable requirement for PM emissions from manufacturing processes.  |
| 3.4.4                   | 3.4.5                        | No       | Establishes Georgia Rule (g) as an applicable requirement for fuel sulfur content for fuel-burning sources.  Boilers VAA and VBA are permitted to combust residual fuel oil (including natural gas). Boilers VCA and VDA are permitted to combust distillate fuel oil (including natural gas).  |

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## IV. Testing Requirements (with Associated Record Keeping and Reporting)

## A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

## B. Specific Testing Requirements

40 CFR 63 Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers: Area Sources": The facility is required to conduct tune-ups on the four boilers (VAA, VBA, VCA, and VDA) on a biennial basis per Item 4. of Table 2 (i.e., 40 CFR 63.11223). Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

Condition 4.2.1 requires the facility to conduct a tune-up of the Boilers (ID Nos. VAA, VBA, VCA, and VDA) according to 40 CFR 63.11223 on a biennial basis.

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## V. Monitoring Requirements

### A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

### B. Specific Monitoring Requirements

Combustion of Natural Gas, Propane, and/or Distillate Fuel Oil: Boilers VCA and VDA are permitted to combust natural gas, propane, and/or distillate fuel oil. Natural gas, propane, and distillate fuel oil are clean burning fuels and the likelihood of violating the PM emissions limits and visible emission limit of Georgia Rules (d) are minimal and there is a reasonable assurance of compliance. Thus no periodic monitoring is prescribed during periods of natural gas, propane, or distillate fuel oil combustion for purposes of Georgia Rule (d).

The maximum anticipated fuel sulfur content of the natural gas and propane fuels is negligible. Thus, the likelihood of violation of Georgia Rule (g) is minimal and no additional periodic monitoring is prescribed during periods of natural gas or propane fuel combustion. For each shipment of distillate fuel oil (Numbers 1 or 2) received for combustion Milliken shall obtain from the fuel supplier a statement that the oil complies with the specification for Number 2 fuel oil as defined in ASTM D396 – *Standard Specifications for Fuel Oil* to ensure compliance with Georgia Rule (g). The requirement to maintain these records is included in Part 6 of the permit.

Combustion of Residual Fuel Oil: Boilers VAA and VBA are permitted to combust natural gas and/or residual fuel oil (Numbers 4, 5, or 6, as defined in ASTM D396). When these boilers are fired with residual fuel oil, daily readings of visible emissions (opacity) are required to reasonably assure compliance with Georgia Rule (d) PM emission limitations and visible emission limitation. The opacity action level shall be any occurrence of visible emissions that is equal to or greater than 20 percent. The Permittee shall determine the cause of the visible emissions and correct any operational problem in the most expedient manner possible. The Permittee shall maintain a written log defining the cause of any occurrence of visible emissions equal to or greater than the opacity action level and corrections made.

Should the Permittee be unable to conduct the required VE check because of inclement weather or because residual fuel oil burning occurs only at night, no VE check is required, and the Permittee shall indicate such in the VE log. The Division requires that Milliken needs to implement an alternative monitoring strategy if the Permittee is unable to conduct the required VE check due to the abovementioned constraints for more than 5 times per quarter for two consecutive calendar quarters. Good combustion of residual fuel oil will ensure that levels of PM and opacity are below applicable limitations. For good combustion of residual oil, 10 to 15 percent excess air is considered necessary, based on available literature. Below 10 percent excess air, soot could start to develop. Boiler oxygen concentrations correspond to percent levels of excess air. For example, boiler oxygen concentrations corresponding to 10 to 15 percent levels of excess air are 2 and 3 percent, respectively. The Division has required monitoring of the oxygen concentration (%) at the furnace exit of the applicable boiler

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within 90 days when a VE check cannot be performed for more than 5 times per quarter for two consecutive quarters. When this occurs, Milliken shall submit to the Division a report showing the normal oxygen operating range for the boiler when burning residual fuel oil. The above monitoring and alternative monitoring requirements are included in Conditions 5.2.1 and 5.2.2.

For each shipment of residual fuel oil received for combustion at the facility, the Permittee shall obtain records from the fuel oil supplier which contain the name of the supplier, the location of the fuel oil when the sample was taken for analysis, the sulfur content, and the methods used for sampling and analyzing the fuel oil to ensure compliance with Georgia Rule (g). The requirement to maintain these records is included in Part 6 of the permit.

<u>Coating Operations:</u> Although the coatings applied in the textile ranges do contain negligible amounts of fatty acids which when cured could generate a "blue haze", the coating operations do not typically generate PM emissions. With these facts in mind, the likelihood of violating Georgia Rules (e) and (b) are minimal and no additional periodic monitoring is prescribed.

## C. Compliance Assurance Monitoring (CAM)

The facility uses no control devices for the boilers or range or mix lines, hence CAM is not applicable.

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## VI. Record Keeping and Reporting Requirements

## A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

## B. Specific Record Keeping and Reporting Requirements

| New<br>Condition<br>No. | Existing<br>Condition<br>No. | Changed? | Description  |
|-------------------------|------------------------------|----------|--|
| 6.1.7b.i.               | 6.1.7b.i.                    | No       | Exceedance definition associated with SO <sub>2</sub> emissions limit for fuel oil combustion in the boilers.  |
| 6.1.7b.ii.              | 6.1.7b.ii<br>6.2.11          | Modified | Exceedance definition associated with NSPS VVV.  |
| 6.1.7b.iii.             | 6.1.7b.iv.                   | Modified | Exceedance definition associated with Avoidance of Georgia Rule (x).   |
| 6.1.7b.iv.<br>and b.v.  | 6.1.7b.iii.                  | No       | Exceedance definition associated with Georgia Rule (g).  |
| 6.1.7b.vi.              | 6.1.7b.v.                    | Modified | Exceedance definition associated with the facility-wide VOC emissions limit.   |
| 6.1.7b.vii.             | 6.1.7b.vi                    | Modified | Exceedance definition associated with the facility-wide individual/total HAP emissions limit   |
| 6.1.7c.i.               | 6.1.7c.i.                    | No       | Excursion definition associated with daily VE check.   |
| 6.1.7d.i.               | 6.1.7d.i.                    | Modified | Reporting requirement associated with SO <sub>2</sub> emissions from fuel oil combustion in the boilers.   |
| 6.1.7d.ii.              | 6.2.11 and 6.2.12            | Modified | Reporting requirement associated with changes made to the chemistry used to make the polyurethane foam.  |
| 6.1.7d.iii.             | 6.2.3                        | No       | Reporting requirement associated with fuel supplier certifications.  |
| 6.2.1                   | 6.2.1                        | No       | Recordkeeping associated with the distillate fuel oil sulfur content from fuel supplier certifications.  |
| 6.2.2                   | 6.2.2                        | No       | Recordkeeping associated with the residual fuel oil sulfur content from fuel supplier certifications.  |
| 6.2.3                   | 6.2.4                        | No       | Measure and record the quantity (gallons) of each grade of fuel oil combusted in each of the boilers.  |
| 6.2.4                   | 6.2.5                        | No       | Specifies the method for determining the sulfur content (weight percent) of residual fuel oil in storage following the transfer of such fuel oil to storage. |
| 6.2.5                   | 6.2.6                        | No       | Specifies the method for determining SO <sub>2</sub> emissions from each boiler for each month that fuel oil is combusted in any of the boilers.             |
| 6.2.6                   | 6.2.7                        | Modified | Specifies the determination of consecutive twelve-month total SO <sub>2</sub> emissions from boilers. Language updated per Condition Vault.                  |
| 6.2.7                   | 6.2.8<br>6.2.13              | Modified | Specifies recordkeeping for VOC-containing materials used at the entire facility.  |
| 6.2.8                   | 6.2.9                        | Modified | NSPS VVV: Specifies recordkeeping to be used to verify compliance that <i>polymeric</i> coating operations are still exempt from NSPS VVV.                   |

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| New       | Existing  | Changed? | Description   |
|-----------|-----------|----------|---|
| Condition | Condition |          |   |
| No.       | No.       |          |   |
| 6.2.9     | 6.2.14    | New      | Facility-Wide VOC Emissions:  |
| 6.2.10    | 6.2.15    | Modified | Use records required by New Condition 6.2.7 to determine and record the total monthly emissions of VOCs from the entire facility.   |
|           |           |          | Use records required by New Condition 6.2.9 to determine and record the total monthly emissions of VOCs from the entire facility on a consecutive twelve-month period basis.                                  |
| 6.2.11    | N/A       | New      | VOC Emissions from Equipment Potentially Subject to Georgia Rule (x):   |
| 6.2.12    | 6.2.10    | Modified | Use records required in New Condition 6.2.7 to determine and record the total monthly   |
|           |           |          | VOC emissions from Process Group ID Nos. EAA, LAA, MAA, and TB01, combined.   |
|           |           |          | Use records required by New Condition 6.2.11 to determine and record the consecutive twelve-month total VOC emissions from Process Groups ID Nos. EAA, LAA, MAA, and TB01, combined, for each calendar month. |
| 6.2.13    | 6.2.16    | No       | Facility-Wide Individual/Total HAP Emissions:   |
| 6.2.14    | 6.2.17    | No       | Maintain monthly usage records of all HAP-containing materials used by the entire   |
| 6.2.15    | 6.2.18    | No       | facility. Use said records to determine and record the monthly emissions of combined  |
|           |           |          | HAPs and the total monthly emissions of each listed HAP from the entire facility. Use   |
|           |           |          | said records to determine and record the consecutive twelve-month total emissions of  |
|           |           |          | each individual HAP and total HAPs for each calendar month.   |
| 6.2.16    | N/A       | New      | Notification and Recordkeeping Requirements of the Boiler GACT per 40 CFR   |
|           |           |          | 63.11225.   |

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### VII. Specific Requirements

A. Operational Flexibility

Not Applicable.

B. Alternative Requirements

None Applicable.

C. Insignificant Activities

See Permit Application on GEOS website. See Attachment B of the permit

D. Temporary Sources

None Applicable.

E. Short-Term Activities

The facility has air compressors on-site that require annual maintenance. During these periods of maintenance, the facility rents diesel compressors to maintain plant operations. Condition 7.6.1 requires the facility to keep records of the duration and frequency each time diesel compressors are brought on-site during annual maintenance of the air compressors.

F. Compliance Schedule/Progress Reports

Not Applicable.

G. Emissions Trading

None Applicable.

H. Acid Rain Requirements

Not Applicable.

I. Stratospheric Ozone Protection Requirements

None Applicable.

J. Pollution Prevention

None Applicable.

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K. Specific Conditions

None Applicable.

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#### **VIII.** General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

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#### **Addendum to Narrative**

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//

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