

Facility Name: **Milliken & Company – New Holland Plant**
City: Gainesville
County: Hall
AIRS #: 04-13-139-00046

Application #: TV-659457
Date Application Received: June 9, 2022
Permit No: 2281-139-0046-V-05-0

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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.

I. Facility Description**A. Facility Identification****1. Facility Name:**

Milliken & Company – New Holland Plant

2. Parent/Holding Company Name

Milliken & Company

3. Previous and/or Other Name(s)

Milliken & Company – New Holland Plant (hereinafter “facility”) has never been permitted under another name.

4. Facility Location

1750 Jesse Jewell Parkway
Gainesville, Georgia (Hall County)

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

The Milliken & Company – New Holland Plant is located in Hall county, which has been designated as “attainment” or “unclassifiable” 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-Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
2281-139-0046-V-04-0	December 13, 2017	Title V Permit renewal
Off-Permit Change	June 10, 2022	Rearrange and update spinning equipment (YSG2).

D. Process Description

1. SIC Codes(s)

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The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

The New Holland Plant produces natural and synthetic spun yarn.

3. Overall Facility Process Description

Milliken & Company – New Holland Plant is composed of three basic operations: yarn spinning, slashing, and support operations.

The yarn spinning operation begins with the opening process where the natural and/or synthetic fibers are pneumatically removed from compressed bales and rough cleaning takes place. The natural and/or synthetic fibers are then blended to specification. The carding operation separates and aligns the fibers, which are collected as a fine sliver. The slivers are combined and drafted during the drawing process to a material suitable for spinning. Spinning is accomplished using either “ring spinning”, open end, or “air jet spinning”. The ring spinning operation uses different steps (roving, ring spinning, and cone winding) to produce a higher quality fiber/yarn. The twisting operation may be a one step or multiple step process to produce a higher strength fiber/yarn. The air jet spinning process is a one-step process for producing the spun yarn. The spun yarn is used as warp or fill yarn. The fill yarn is wound into packages and readied for shipment. The portion of the spun yarn to be used as warp yarn is wrapped onto large cylinders called warp beams. Yarn packages are loaded onto a creel and the yarn ends are attached to and wrapped around the warp beam as an even sheet of yarn. Typically, warp yarn is slashed prior to shipment. Emission Group YSG2 encapsulates all yarn spinning processes including opening, blending, carding, drawing, roving, spinning, winding, twisting, warping, and ancillary supporting equipment. The facility cleans and circulates indoor air to ensure quality, temperature, and humidity control.

The warp yarn received from Equipment Group YSG2 is saturated with a sizing material (e.g., aqueous solution of starch or polyvinyl alcohol) in the slashing operation to enhance the weaving process. The slasher is comprised of multiple sections that take yarn from the warp beam and pass it through a size box that contains the aqueous sizing solution. Squeeze rolls remove excess

solution, and the yarn then passes through a drying unit that consists of steam-heated cans (drying cylinders). After being dried, the warp threads are separated and wrapped on a warp beam and are prepared for shipment. The slashing operation consists of four slashers along with associated mixing and storage vessels that make up Equipment Group SLG1.

Facility supporting operations include three boilers that have the capacity to fire natural gas and propane: The boilers (ID Nos. BLR1, BLR3, and BLR4) that produce process and comfort heating steam for the entire facility. The support operations also include a host of insignificant and trivial emission units listed in Appendix B of the current operating permit. Though the equipment is on-site, the insignificant activity for the blowdown water collection is not currently in use. Facility may elect to use it in the future.

4. Overall Process Flow Diagram

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

E. Regulatory Status

1. PSD/NSR

Before April 2017, the three boilers (ID Nos. BLR1, BLR3, and BLR4) were allowed to burn distillate fuel oils and residual fuel oils in addition to natural gas and propane. If these three boilers burn residual fuel oils only, they would have had a sulfur dioxide (SO₂) potential-to-emit (PTE) greater than 250 tpy. Existing Condition 3.2.1 of Title V Permit No. 2281-139-0046-V-03-0 capped the SO₂ emissions below 250 tpy in order to keep the facility a synthetic minor (SM) source under the PSD regulations.

In April 2017, the facility decided to burn natural gas and propane only in the three boilers. The fuel requirement is now included in current Condition 3.2.1. With this fuel change, the facility's SO₂ PTE has significantly dropped to less than 1 tpy. With the PTE for each other criteria pollutant below 250 tpy, the facility is now a true minor source under the PSD regulations.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓			✓
PM ₁₀	✓			✓
PM _{2.5}	✓			✓
SO ₂	✓			✓
VOC	✓			✓
NO _x	✓			✓

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
CO	✓			✓
TRS	✓			✓
H ₂ S	✓			✓
Individual HAP	✓	✓		
Total HAPs	✓			✓
Total GHGs	✓			✓

According to the table above, the facility is major under Title V of 1990 CAAA for single hazardous air pollutant (HAP).

3. MACT Standards

Since the facility is major for single HAP, it is subject to the following two major source maximum available control technology (MACT) regulations in 40 CFR 63:

40 CFR 63, Subpart OOOO – Printing, Coating, and Dyeing of Textiles and Other Fabrics

40 CFR 63, Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters

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	Yes
Program Code M – Part 63 NESHAP	Yes
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

The facility is currently in compliance with all applicable rules and regulations.

D. Permit Conditions

None applicable.

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
BLR1	13 MMBTU/hr Cleaver Brooks Boiler Burn natural gas and propane only Installed in 1986	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDDD	None	None
BLR3	9 MMBTU/hr Cleaver Brooks Boiler Burn natural gas and propane only Installed in 2004	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDDD	None	None
BLR4	33.6 MMBTU/hr Superior Boiler Burn natural gas and propane only Installed in 2016	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(III) 40 CFR 60 Subpart A 40 CFR 60 Subpart Dc 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDDD	None	None
YSG2	Spinning Process Group	391-3-1-.02(2)(b) 391-3-1-.02(2)(fff)	None	None
SLG1	Slashing Equipment Group	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart A 40 CFR 63, Subpart OOOO	None	None

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

B. Equipment & Rule Applicability

Emission and Operating Caps:

All boilers are required to burn natural gas and/or propane only.

Rules and Regulations Assessment:

The Textile MACT (40 CFR 63, Subpart OOOO) is applicable only to slashing operations, which includes the slashers, and size mixers and storage vessels. The slashing operations are required to use ‘no HAP-containing materials.’ Please note that 40 CFR 63 Subpart OOOO was amended on March 15, 2019. The amended requirements have been incorporated in the permit. According to 63.4311(f), EPA requires the facility to submit the semiannual compliance reports electronically to the EPA via CEDRI after March 15, 2021. Therefore, Condition 6.2.4 has been revised to require that the facility submit the semiannual report in hard copy to the Division and in electronic form to U.S. EPA.

The Boiler MACT (40 CFR 63 Subpart DDDDD) is applicable to the boilers BLR1, BLR3, and BLR4. Boilers BLR1 and BLR3 have the ability to burn natural gas and fuel oil. Milliken has requested to burn natural gas and propane only in the boilers BLR1 and BLR3. Therefore, all three boilers meet the definition of “Units designed to burn gas 1 fuels,” and are only subject to the work practice standards in Table 3 to 40 CFR 63 Subpart DDDDD and the associated monitoring, record keeping, and reporting requirements.

NSPS Dc (40 CFR 60, Subpart Dc) is applicable to the boiler BLR4 since the BLR4 was constructed after 1989.

NSPS Kb (40 CFR 60, Subpart Kb) is not applicable to any volatile organic storage vessel at the facility based on storage capacity and/or maximum true vapor pressure.

Boiler BLR1 is subject to the Georgia Rule (d) particulate matter emission limit for boiler constructed before 1972. Boilers BLR3 and BLR4 are subject to the particulate matter and opacity limits for boilers constructed during or after 1972.

Georgia Rule (b) is applicable to Boiler BLR1, the yarn spinning group (YSG2), and the slashing group (SLG1).

Boilers BLR1, BLR3, and BLR4 are subject to Georgia Rule (g).

Georgia Rule (fff) is applicable to the yarn spinning group (YSG2).

Georgia Rule (e) is applicable to the slashing group (SLG1) and yarn spinning group (YSG2).

Georgia Rule (III) is applicable to Boiler BLR4 since Boiler BLR4 was installed after May 1, 1999 with a maximum heat input capacity of 33.6 MMBtu/hr. BLR1 is not subject to Georgia Rule (III) since the boiler BLR1 was installed before May 1, 1999. BLR3 is not subject to Georgia Rule (III) since the maximum heat input capacity is less than 10 MMBtu/hr.

Georgia Rule (rrr) is potentially applicable to Boilers BLR1 and BLR3. Since the entire facility is located in Hall County, and has a NO_x potential emissions less than 100 tpy, per GA Rule (rrr)4.(ii), BLR1 and BLR3 are not “affected units” and are therefore not subject to GA Rule (rrr).

C. Permit Conditions

Condition 3.2.1 limits the boilers BLR1, BLR3, and BLR4 to burning natural gas and/or propane only.

Conditions 3.3.1 through 3.3.3 are permit conditions that document the applicability, general compliance requirement and the slashing process emission limit of 40 CFR 63, Subpart OOOO (Textile MACT). The slashing process is the only process at the facility subject to the Textile MACT.

Conditions 3.3.4 through 3.3.6 are MACT Subpart DDDDD requirements for Boilers BLR1, BLR3, and BLR4.

Condition 3.3.7 is NSPS Subpart Dc requirement for Boiler BLR4.

Condition 3.4.1 specifies the allowable PM emission rates from Boiler BLR1 in accordance with Georgia Rule 391-3-1-.02(2)(d).

Condition 3.4.2 specifies the allowable PM emission rates from Boilers BLR3 and BLR4 in accordance with Georgia Rule 391-3-1-.02(2)(d).

Condition 3.4.3 specifies the opacity limit from Boilers BLR3 and BLR4 in accordance with Georgia Rule 391-3-1-.02(2)(d).

Condition 3.4.4 specifies the opacity limit that applies to Boiler BLR1 and Equipment Groups YSG2 and SLG1, in accordance with Georgia Rule 391-3-1-.02(2)(b).

Condition 3.4.5 specifies the allowable fuel sulfur content limit for BLR1, BLR3, and BLR4 in accordance with Georgia Rule 391-3-1-.02(2)(g).

Condition 3.4.6 specifies the allowable PM emission rate from Equipment Group YSG2 in accordance with Georgia Rule 391-3-1-.02(2)(fff).

Condition 3.4.7 specifies the allowable PM emission rate from Equipment Group SLG1 in accordance with Georgia Rule 391-3-1-.02(2)(e).

Permit Condition 3.4.8 is the Georgia Rules 391-3-1-.02(2)(lll) requirement for boiler BLR4.

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

Not applicable.

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

Conditions 5.2.1 are MACT DDDDD work practice (annual or biennial tune up) requirements for boilers BLR1, BLR3, and BLR4.

The fuel consumption meter monitoring requirement specified in existing Condition 5.2.2 is not included in the proposed Title V renewal permit. As 40 CFR 60.48c(g)(2) requires the record keeping of the fuel consumption records, it does not specify any fuel consumption meters.

Condition 5.2.2 now includes the GA Rule (III) NO_x monitoring and boiler tune up requirements for boiler BLR4.

C. Compliance Assurance Monitoring (CAM)

An emission unit is subject to the provisions of 40 CFR 64, “Compliance Assurance Monitoring” because:

- It is located at a major source that is required to obtain a Title V Permit. [§64.2(a)]
- It is subject to an emission limitation or standard for the applicable pollutant (PM). [§64.2(a)(1)]
- The facility uses a control device to achieve compliance. [§64.2(a)(2)]
- Potential pre-controlled emissions of the applicable pollutant (particulate matter) from such emission unit are at least 100 percent of major source threshold. [§64.2(a)(3)]

Since none of the emission units in Table 3.1 of the proposed Title V renewal permit is equipped with any kind of air pollution control devices, they are all not subject to the CAM requirements specified in 40 CFR 64.

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

Condition 6.1.7b is the exceedances reporting requirements for Conditions 3.2.1 and 3.3.3.

Condition 6.1.7d is the additional reporting requirements for Condition 5.2.1.

Existing Condition 6.1.8 is being removed because the emissions statement requirement has been removed from the Georgia Rules for Air Quality Control.

Conditions 6.2.1 through 6.2.4 are the recordkeeping and reporting requirements for MACT Subpart OOOO. Conditions 6.2.3 and 6.2.4 have been modified to incorporate the changes to 40 CFR 63 Subpart OOOO that was promulgated on March 15, 2019. The semiannual compliance report must still be submitted to EPD as a hard copy, separately from an electronic copy to EPA; GA EPD still requires the report to determine compliance with all applicable requirements of 40 CFR Part 63 Subpart OOOO.

Condition 6.2.5 is the NSPS Subpart Dc reporting and recordkeeping requirements for BLR4.

Conditions 6.2.6 through 6.2.8 are MACT Subpart DDDDD recordkeeping and reporting requirements for boilers BLR1, BLR3, and BLR4.

VII. Specific Requirements**A. Operational Flexibility**

The facility did not request any additional operational flexibility.

B. Alternative Requirements

Not applicable

C. Insignificant Activities

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

D. Temporary Sources

Not applicable

E. Short-Term Activities

The New Holland Plant noted on Form D5 that 40 CFR 61, Subpart M (Asbestos) is a potentially applicable requirement. Thus, Condition 7.6.1 is retained from the existing permit to cover those times when asbestos demolition and renovation take place at the facility.

F. Compliance Schedule/Progress Reports

Not applicable

G. Emissions Trading

Not applicable

H. Acid Rain Requirements

Not applicable

I. Stratospheric Ozone Protection Requirements

Not applicable

J. Pollution Prevention

Not applicable

K. Specific Conditions

Not applicable

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.

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.//