

502(b)(10) Permit for Part 70 Source

Permit Attachment No.: **2281-139-0046-V-03-2** Effective Date: **May 6, 2016**

Facility Name: **Milliken & Company – New Holland Plant**
1750 Jesse Jewell Parkway
Gainesville, Georgia 30501, Hall County

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Parent/Holding Company: Milliken & Company

Facility AIRS Number: 04-13-139-00046

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to or in effect under the Act, the Permittee described above is issued a SIP Construction and Operating Permit for:

The installation and operation of a Superior Model No. X6-X-4000 33.6 MMBtu/hr natural gas/propane fired boiler (Emission Unit ID No. BLR4).

This modification qualifies as a Section 502(b)(10) change to the Part 70 source in accordance with Georgia Air Quality Control Rule 391-3-1-03(10)(b)(5).

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted or in effect under that Act, or any other condition of this Permit and Permit No. 2281-139-0046-V-03-0. Unless modified or revoked, this Permit expires upon issuance of the next Part 70 Permit for this source.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. TV-23668 dated January 21, 2016, any other applications upon which this Permit or Permit No. 2281-139-0046-V-03-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **13** page(s).

[Signed]

Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION**1.3 Process Description of Modification**

The installation and operation of a Superior Model No. X6-X-4000 33.6 MMBtu/hr natural gas/propane fired boiler (Emission Unit ID No. BLR4).

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

None applicable.

2.2 Facility Wide Federal Rule Standards

None applicable.

2.3 Facility Wide SIP Rule Standards

None applicable.

2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None applicable.

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1.1 Additional Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
BLR4	33.6 MMBTU/hr Superior Boiler Burn natural gas and propane only	391-3-1-.02(2)(d) 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR 60 Subpart Dc 40 CFR 63 Subpart DDDDD	3.2.3, 3.3.8, 3.3.9, 3.3.10, 3.4.8, 3.4.9, 3.4.10, 3.4.11, 5.2.4, 5.2.5, 5.2.6, 6.2.14 through 6.2.19	None	None

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

3.2 Equipment Emission Caps and Operating Limits

Added Condition:

3.2.3 The Permittee shall burn natural gas and/or propane only in the boiler BLR4.
[391-3-1-.03(2)(c) - PSD Avoidance]

3.3 Equipment Federal Rule Standards

Added Conditions:

40 CFR 60 Subpart Dc

3.3.8 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart Dc - "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" for operation of the boiler No. BLR4.
[40 CFR 60.40c] [Vault NS-023-OT, 03/10]

40 CFR 63 Subpart DDDDD

3.3.9 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart DDDDD - "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters." for the operation of the boiler BLR4.
[40 CFR 63.7480]

3.3.10 The Permittee shall comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, Subpart DDDDD – *National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process heaters*. In particular, the Permittee shall comply with the following work practice standards at all times during the operation of the boiler BLR4:
[40 CFR 63.7490(a), 63.7495(a), 63.7499(l), 63.7499(u), 63.7500(a)(1) & 63.7505(a)]

- a. The Permittee must comply with 40 CFR 63 Subpart DDDDD upon startup of the boiler BLR4.
[40 CFR 63.7495(a)]
- b. The Permittee must demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR 63 Subpart DDDDD within the applicable annual schedule as specified in §63.7515(d) following the initial compliance date specified in §63.7495(a).
[40 CFR 63.7510(g)]
- c. Conduct annual tune-ups on the boiler BLR4 not equipped with a continuous oxygen trim systems in accordance with Condition 5.2.5.
[40 CFR 63.7515(d) & Table 3 to 40 CFR Part 63, Subpart DDDDD]
- d. Conduct an initial performance tune-up on the boiler BLR4 in accordance with Condition 5.2.2 no later than 13 months after the startup.
[40 CFR 63.7515(d)]

3.4 Equipment SIP Rule Standards

Added Conditions:

3.4.8 The Permittee shall not discharge, or cause the discharge, into the atmosphere from boiler BLR4, visible emissions the opacity of which each is equal to or greater than twenty (20) percent except for one six-minute period per hour of not more than twenty seven (27) percent opacity.
[391-3-1-.02(2)(d)3.]

3.4.9 The Permittee shall not discharge, or cause the discharge into the atmosphere from boiler BLR4, particulate emissions in excess of the rate derived from $E = 0.5 (10/R)^{0.5}$ pounds per million BTU heat input, where E = allowable particulate emission rate in pound per million BTU heat input and R = heat input of the boiler in million BTU per hour.
[391-3-1-.02(2)(d)2(ii)]

3.4.10 The Permittee shall not cause, let, suffer, permit, or allow emissions of NO_x, from boiler BLR4, exceeding 30 ppm at 3 percent O₂, dry basis during the period May 1 through September 30 of each year.
[391-3-1-.02(2)(ll)] [Vault GA-014-EL, 02/10]

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3.4.11 The Permittee shall not fire any fuel in the boiler BLR4 whose sulfur content exceeds 2.5 percent by weight.
[391-3-1-.02(2)(g)2.]

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None Applicable.

PART 4.0 REQUIREMENTS FOR TESTING**4.1 General Testing Requirements**Added Condition:

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 which pertain to the emission units listed in Section 3.1 are as follows:

- j. Method 202 in conjunction with Method 5 for the determination of Total Particulate Matter (Filterable and Condensable) from Stationary Sources.
[Vault NS-023-TC, 03/10]

4.2 Specific Testing Requirements

None applicable.

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**5.1 General Monitoring Requirements**

5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.

[391-3-1-.02(6)(b)1]

5.2 Specific Monitoring RequirementsAdded Conditions:

5.2.4 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. A natural gas consumption meter to continuously measure and record the total quantity of natural gas, in cubic feet, burned in the boiler BLR4. Data shall be recorded monthly. As allowed by Subpart Dc, the Permittee may propose an alternative protocol for monitoring fuel usage. In lieu of installing fuel meters, the Permittee may maintain records of the total amounts of natural gas and fuel oil delivered to the facility each calendar month.

[40 CFR 60.48c(g)(2)]

5.2.5 To demonstrate continuous compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD, Permittee shall conduct tune-ups every one year on the natural gas-fired boiler BLR4. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each annual tune-up shall be conducted no more than 13 months, respectively, after the previous tune-up and in accordance with the following procedure:

[40 CFR 63.7515(d), 63.7540(a)(10)]

- a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer;
- f. Maintain on-site and submit, if requested by the Division, a report containing the following information:
 - i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
 - ii. A description of any corrective actions taken as a part of the tune-up; and
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the boiler was physically and legally capable of using more than one type of fuel during that period. Boiler sharing a fuel meter may estimate the fuel used by each unit.
- g. If the boiler is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 days of startup.

5.2.6 The Permittee shall, each calendar year, monitor emissions of nitrogen oxides (NO_x) from the boiler BLR4, unless the boiler will not operate during the ozone season (May 1 through September 30 of each year) by performing a tune-up for each boiler to demonstrate compliance with the NO_x concentration limit of Condition No. 3.4.10 using the following procedures:
[391-3-1-.02(6)(b)1 and PTM Section 2.119] [Vault GA-014-MO, 02/10]

- a. The tune-up shall be performed no earlier than March 1 and no later than May 1 of each calendar year. In the case of initial startups that occur after May 1 but before September 30, tune-ups shall be performed no later than 120 hours after startup. The tune-up shall be performed at the normal maximum operating load expected during the period from May 1 to September 30 of each year.
- b. The tune-up shall be performed by using the manufacturer recommended settings for reduced NO_x emissions or by using a NO_x analyzer. Adjustments shall be made, as needed, so that NO_x emissions are reduced in a manner consistent with good combustion practices and safe fuel-burning equipment operation.
- c. Following the adjustments, or determination that adjustments are not required, the Permittee shall perform a measurement consisting of a minimum of three test runs to demonstrate that the average emissions are less than or equal to the NO_x concentration limit of Condition No. 3.4.10. Each test run shall be a minimum of 30 minutes of operational data in length. Following any test run which results in an average NO_x concentration that exceeds the NO_x limit of Condition No. 3.4.10, the Permittee shall make adjustments to the boiler and conduct a new set of test runs within one day. Subsequent adjustments followed by test runs shall be continued until the average of 3 consecutive test runs do not exceed the NO_x concentration limit of Condition No. 3.4.10.
- d. All measurements of NO_x and oxygen concentrations in paragraphs b. and c. of this condition shall be conducted using procedures of the American Society for Testing and Materials (ASTM) Standard Test Method for Determination of NO_x, Carbon Monoxide (CO), and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, ASTM D 6522; procedures of Gas Research Institute Method GRI-96/0008, EPA/EMC Conditional Test Method (CTM-30) Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers; or procedures of EPA Reference Method 7E and 3A.
- e. The Permittee shall maintain records of all tune-ups performed in accordance with this condition. These records shall include the following:
 - i. date and time the tune-up was performed
 - ii. the boiler settings for each test run

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- iii. the average NO_x concentration (in ppm at 3 percent O₂, dry basis) for each test run
- iv. what operating parameters were adjusted to minimize NO_x emissions
- v. an explanation of how the final (compliant) settings were determined

f. Following the tune-up, from the period May 1 through September 30 of each year, the Permittee shall operate each affected boiler using the settings determined during the annual tune-up. If no parameters can be monitored to indicate the performance of a specific boiler, the Permittee shall certify that no adjustments have been made to the boiler by the Permittee and/or any third party since the most recent successful tune-up was completed. This certification shall be made in writing no later than October 15 of each year and shall be maintained with the records required by paragraph e. of this condition.

g. If a boiler is capable of operating for 3 consecutive test runs with average NO_x concentrations of less than or equal to 15 ppm corrected to 3 percent oxygen, the Permittee may conduct the next subsequent tune-up in the fourth calendar year following the demonstration of 15 ppm or less. Results of measurements of NO_x and oxygen concentrations and tune-ups, maintenance and records, and subsequent boiler operation shall otherwise be conducted as described in paragraphs a. through f. of this condition. The Permittee shall continue to make annual certifications of no adjustments since the previous tune-up.

h. As an alternative to complying with the requirements in this condition, the Permittee shall submit documentation no later than April 30 of each year confirming that an affected unit will not operate during the months of May through September. As a minimum, the documentation shall include the identification of the facility, the permit number, and the specific affected units that will not be operated.

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS**6.1 General Record Keeping and Reporting Requirements**Added Condition:

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:

iii. Any failure to conduct the tune-up required by Condition 5.2.5.

6.2 Specific Record Keeping and Reporting RequirementsAdded Conditions:

6.2.14 The Permittee shall submit notification of the date of actual startup of the boiler BLR4, as provided by 40 CFR 60.7 of this part. This notification shall include all items specified in 40 CFR 60.48c(a).

[40 CFR 60.48c(a)] [Vault NS-023-RR, 03/10]

6.2.15 The Permittee shall record and maintain records of the amount of each fuel combusted in the boiler BLR4 during each calendar month as required by Permit Condition 5.2.4.

[40 CFR 60.48c(g)(2)] [Vault NS-023-RR, 09/11]

6.2.16 The Permittee shall submit fuel usage records required by Permit Condition 6.2.15 as part of the report required by Permit Condition 6.1.4.

[40 CFR 60.48c(j)] [Vault NS-023-RR, 09/11]

6.2.17 The Permittee shall submit annual compliance reports for the natural gas-fired the boiler BLR4 in accordance with the following requirements:

[40 CFR 63.7550(b)(1) thru (4) & 63.7550(h)(3)]

a. The first compliance report must cover the period beginning on the startup of the boiler BLR4 and ending on December 31 within one year after the startup of the boiler BLR4.

[40 CFR 63.7550(b)(1)]

b. The first compliance report must be postmarked or submitted no later than January 31.

[40 CFR 63.7550(b)(2)]

- c. Each subsequent annual compliance report must cover the one year periods from January 1 to December 31.
[40 CFR 63.7550(b)(3)]
- d. Each subsequent compliance report must be postmarked or submitted no later than January 31.
[40 CFR 63.7550(b)(4)]
- e. All reports must be submitted electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the report must be submitted to U.S. EPA at the appropriate address listed in 40 CFR 63.13. At the discretion of U.S. EPA, these reports must also be submitted in the format specified by U.S. EPA.
[40 CFR 63.7550(h)(3)]

6.2.18 The Compliance reports required in Condition 6.2.17 shall contain the following information:
[40 CFR 63.7550(c)(5)]

- a. Company and Facility name and address.
- b. Process unit information, emissions limitations, and operating parameter limitations, as applicable.
- c. Date of report and beginning and ending dates of the reporting period.
- d. The total operating time during the reporting period.
- e. The date of the most recent tune-up for the boiler BLR4. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
- f. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

6.2.19 To comply with the reporting requirements of 40 CFR, Part 63, Subpart DDDDD, the Permittee shall maintain the following records for 5 years following the date of each occurrence, report, or record, as applicable, according to 40 CFR 63.10(b)(1) (minimum of 2 years on site and the remaining 3 years may be offsite). The records shall be kept on site, or be accessible from onsite (for example, through a computer network), in a form suitable and readily available for expeditious review upon request.
[40 CFR 63.7555(a)]

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- a. A copy of each notification and report submitted to comply with 40 CFR, Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
- b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).