



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit Amendment

Facility Name: Thiele Kaolin Company - Deepstep Road Plant
Facility Address: 4062 Deepstep Road
Sandersville, Georgia 31082 (Washington County)
Mailing Address: P.O. Box 1056
Sandersville, Georgia 31082-4976
Parent/Holding Company: Thiele Kaolin Company
Facility AIRS Number: 04-13-303-00008

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 and in effect under the Act, the Permittee described above is issued a construction permit for:

Replacement of Boiler BL5, removal of 40 CFR 63 Subpart JJJJJJ conditions from permit and incorporation of 40 CFR 60 Subpart Dc requirements for boiler BL5 in permit.

This Permit Amendment shall also serve as a final amendment to the Part 70 Permit unless objected to by the U.S. EPA or withdrawn by the Division. The Division will issue a letter when this Operating Permit amendment is finalized.

This Permit Amendment 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 and in effect under that Act, or any other condition of this Amendment and Permit No. 3295-303-0008-V-06-0. Unless modified or revoked, this Amendment expires upon issuance of the next Part 70 Permit for this source. This Amendment 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 App No. TV-874615 dated October 31, 2024; any other applications upon which this Amendment or Permit No. 3295-303-0008-V-06-0 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 Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 5 pages.



Jeffrey W. Cown

Jeffrey W. Cown, Director
Environmental Protection Division

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PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.2 Facility Wide Federal Rule Standards

2.2.2 Condition deleted.

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 Emission Units

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
BL4	Boiler No. 4	391-3-1-.02(2)(d)	None	
BL5	Boiler No. 5	391-3-1-.02(2)(d) 40 CFR 60 Subpart Dc 40 CFR 60 Subpart A	None	
D1	Spray Dryer No. 1	291-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	D1C	Baghouse
D2	Spray Dryer No. 2	291-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	D2C	Baghouse
D3	Spray Dryer No. 3	291-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	D3C	Baghouse
D4	Spray Dryer No. 4	291-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	D4C	Baghouse
D5	Apron Dryer	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	None	
F1	Spray Dryer No. 1 Bulk Railcar Loading	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	F1C	Baghouse
F2	Spray Dryer No. 2 Bulk Railcar Loading	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	F2C	Baghouse
F3	Spray Dryer No. 3 Bulk Railcar Loading	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	F3C	Baghouse
F4	Spray Dryer No. 4 Bulk Railcar Loading	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	F4C	Baghouse
F4B	Spray Dryer No. 4 Bagging Machine	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	F4C	Baghouse

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Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
F5	Apron Dryer Bulk Railcar Loading	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	F5C	Baghouse
F5B	Apron Dryer Big (IBC) Bagger	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	F5C	Baghouse
F4D	Spray Dryer No. 4 Bulk Bagger	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	F4C	Baghouse
S1	Soda Ash Make-down Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	S1C	Scrubber

* 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.

3.2 Equipment Emission Caps and Operating Limits

Amended Condition

- 3.2.2 The Permittee shall not burn fuel containing more than 0.5 percent sulfur, by weight, in any fuel burning sources/ **fuel burning equipment**/process units at this facility, unless otherwise specified by the Director. **Distillate fuel oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, "Standard Specification for Fuel Oils."**
[40 CFR 52.21, *Prevention of Significant Quality Deterioration* (PSD), Avoidance and **40 CFR 60.42c(d)**]

3.3 Equipment Federal Rule Standards

Amended Conditions

- 3.3.2 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart Dc - "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of the Boiler BL5.
[40 CFR 60 Subpart Dc]
- 3.3.3 The Permittee shall only use natural gas, propane and fuel oil as fuel for the operation of the boilers BL4 and BL5. In Particular, fuel oil shall be fired in boiler BL4 and BL5 only during periods of gas curtailment, gas supply emergencies, or periods of testing on fuel oil. Testing on fuel oil shall not exceed 48 hours per calendar year for each boiler.
[Avoidance of 40 CFR 63 Subpart JJJJJ – 40 CFR 63.11195]
- 3.3.4 Condition deleted.

3.4 Equipment SIP Rule Standards

Amended Condition

- 3.4.2 The Permittee shall comply with the applicable provisions of Georgia Air Quality Control Rule 391-3-1-.02(2)(d), *Fuel-Burning Equipment*; for all subject equipment. In particular, the Permittee shall not cause, let, suffer, permit, or allow any emissions from Boilers BL4 and BL5 which:
- a. Contain fly ash and/or other particulate matter in amounts equal to or exceeding 0.5 pounds per million BTU heat input for equipment with a rated capacity of less than 10 million BTU heat input per hour.
[391-3-1-.02(2)(d)2.(i)]
 - b. Contain fly ash and/or other particulate matter in amounts equal to or exceeding the rate derived from $P = 0.5(10/R)^{0.5}$ where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds per million BTU for equipment with a rated capacity equal to or greater than 10 million BTU heat input per hour, and equal to or less than 250 million BTU heat input per hour.
[391-3-1-.02(2)(d)2.(ii)]
 - c. Exhibit visible emissions, the opacity of which is equal to or greater than 20 percent except for one six-minute period per hour of not more than 27 percent opacity.
[391-3-1-.02(2)(d) and 40 CFR 60.43c(c)]

PART 4.0 REQUIREMENTS FOR TESTING

4.2 Specific Testing Requirements

New Condition

- 4.2.3 For Boiler BL5 demonstrating compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier.
[40 CFR 60.44c(h)]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**5.2 Specific Monitoring Requirements**Amended Conditions

5.2.7 The Permittee shall verify that each shipment of fuel oil received, for combustion in stationary sources, is distillate oil by obtaining fuel oil supplier certifications. Supplier certifications shall contain the name of the supplier and a statement from the supplier that the oil is distillate oil. For the purposes of this Condition, distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 and 2 as defined in ASTM D396. A delivery ticket from the supplier describing the fuel as ultra-low sulfur diesel (ULSD) is sufficient to satisfy this requirement. **Verification of the fuel oil sulfur content may also be done by analysis of the fuel oil conducted by methods of sampling and analysis which have been specified or approved by the Division.**

[391-3-1-.02(6)(b)1, **40 CFR 60.44c(h)(1)** and 40 CFR 70.6(a)(3)(i)]

5.2.11 The Permittee shall install, calibrate, maintain and operate natural gas and distillate fuel oil consumption meters on Boiler BL5. As allowed by 40 CFR 60 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 Subpart Dc]

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

6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry.

[391-3-1-.02(6)(b)1(i), **40 CFR 60 Subpart Dc** and 40 CFR 70.6(a)(3)]

6.2 Specific Record Keeping and Reporting RequirementsAmended Conditions

6.2.5 The Permittee shall retain the following records regarding fuel fired in Boiler BL5:
[40 CFR 60.48c(g)(2)]

- a. Shipping receipts or analyses used by the Permittee, as per Condition No. 5.2.7, to verify compliance with Condition No. 3.2.2, for distillate fuel oil fired in the boiler(s).
- b. A statement from each oil supplier used that the distillate fuel oil delivered complies with Condition No. 3.2.2.

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- c. Quantity of distillate fuel oil burned monthly in the boiler BL5.
- d. Quantity of natural gas burned monthly in the boiler BL5.
- e. As an alternative to c. and d. of this condition, the Permittee may maintain monthly records of the amounts of natural gas and fuel oil delivered to the facility.

6.2.6 The Permittee shall submit to the Division a semiannual report, within 60 days following the end of each such period ending June 30 and December 31, regarding distillate fuel oil purchases and the firing of such oil in Boiler BL5. The report shall contain:

- a. The name of each fuel oil supplier and a statement from each supplier certifying that the fuel oil complies with Condition No. 3.2.2.
- b. A certified statement signed by the Permittee that the records of fuel oil supplier certifications submitted in accordance with a. of this condition represent all of the fuel oil fired in the boiler BL5 during the reporting period.

If no fuel oil was fired in Boiler BL5 during the reporting period, the report shall so state.
[40 CFR 60.48c(e)(11), 40 CFR 60.48c(j) and 40 CFR 60.48c(f)(1)]

6.2.7 The Permittee shall submit to the Division written notification of initial startup of Boiler BL5 within 15 days after such date.
[40 CFR 60.48c(a)]