

Facility Name: **Caraustar Industries, Inc.**  
 City: Austell  
 County: Cobb  
 AIRS #: 04-13-067-00022

Application #: TV-22187  
 Date Application Received: October 15, 2013  
 Permit No: 2631-067-0022-V-04-0

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## Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 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. This 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 primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to **Caraustar Industries, Inc** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This 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: Caraustar Industries, Inc.

2. Parent/Holding Company Name

Caraustar Industries, Inc.

3. Previous and/or Other Name(s)

Also operates under the name of Austell Box Board Corporation, Inc. and Sweetwater Paper Board Company, Inc.

4. Facility Location

3400 Joe Jerkins Boulevard, Austell, Georgia 30106

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

The facility is located in a non-attainment area, Cobb County.  
Also, facility is within 200 km of the Class I Cohutta Wilderness Area.

### B. Site Determination

Caraustar Industries consists of Austell Box Board (ABB) Corporation Mills #1 and #2, Sweetwater Paper Board Company, Inc. (CPG) and Star Paper Tube, Inc., which have the same SIC code, are located on the same property, and have one Title V permit.

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
2631-067-0022-V-03-0	June 24, 2009	Title V renewal

2631-067-0022-V-03-1	January 17, 2012	Minor modification for the revision of periodic reporting deadlines.
Off-Permit Change 03/19/2010	March 19, 2010	Off-Permit Change to conduct trial burn for co-firing wood biomass beginning 03/22/2010 in the facility's coal-fired boiler (CFB).
2631-067-0022-V-03-2	December 18, 2014	Significant modification for the removal of two boilers and to establish a SM status for HAPs.

#### D. Process Description

##### 1. SIC Codes(s)

###### 2631-Paper Board Mills

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)

Caraustar Industries manufactures and converts paperboard, manufactures paperboard for the building and packaging industries, and manufactures paper tubes and protective board.

##### 3. Overall Facility Process Description

ABB Mill #1 manufactures cardboard paper sheets, which are used in manufacturing jigsaw puzzles, book covers, and three-ring binders. ABB Mill #2 manufactures paper rolls of varying widths, which are used by CPG to produce paper tubes and cores. CPG, the paper and tube manufacturing facility, markets finished products to textile, carpet, plastic and construction industries. The Sweetwater Paperboard mill manufactures paper rolls which form the front and back of sheetrock.

Recycled wastepaper is the primary raw material consumed by each mill. In order to reuse the recycled wastepaper, it goes through a series of pulpers, cleaners, a dump chest, thickeners, a blend chest, refiners, and a machine chest to remove any contaminants and develop the grade of recycled fiber required to produce the final product. The recycled fiber then enters a paper

machine, which removes any water in the pulp as well as presses the fiber. The process line in each of the mills (ABB Mill #1, ABB Mill #2, and Sweetwater Paperboard Mill) is similar in that the chemicals or concentration of chemicals may vary depending on the grade of recycled fiber needed.

A direct-fired air heater is associated with each paper machine (3) to provide a hot air system for the dryer section of each paper machine. Each direct-fired heater (3) is primarily a steam heated air system and uses natural gas and #2 fuel oil as back-up fuels. A 313 MMBTU/hr Coal-Fired Boiler (CB01) is used to generate steam for the entire facility, which is the only significant source of emissions. A fly ash storage silo, bottom ash storage silo, and a lime storage silo are associated with the coal-fired boiler. **Note that back-up boilers; Mill # 2 boiler (MT01) and Sweetwater Paperboard boiler (SW01), which were not in operation, have been removed.**

#### 4. Overall Process Flow Diagram

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

### E. Regulatory Status

#### 1. PSD/NSR

The facility is a "major" source under PSD/NSR regulations as a result of the installation of the 313 MMBTU/hr Coal Fired Boiler. The Boiler underwent PSD review for particulate matter, nitrogen oxides, and sulfur dioxide.

The VOC potential emissions are limited to 25 tons/yr.  
The NO<sub>x</sub> potential emissions are greater than 50 tons/yr.

The current permit (# 2631-067-0022-V-03-0) limits the facility to 25 tons of VOC emissions (Condition 2.1.1) to avoid the VOC RACT. The facility is subject to the NO<sub>x</sub> RACT requirements of Rule 391-3-1-.02(2)(yy), and the NO<sub>x</sub> RACT.

Caraustar is a major source of HAP emissions. The Permit Amendment No. 2631-067-0022-V-03-2 limited the facility's HAPs emissions below the major source threshold so that the facility will not be subject to 40 CFR 63 Subpart DDDDD – "Industrial, Commercial, and Institutional Boilers and Process Heaters".

Note that the facility will be classified as a HAPs Area Source under 40 CFR 63 on and after January 1, 2016, and will be subject to 40 CFR 63 Subpart JJJJJ – "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers".

## 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	Yes	✓		
PM <sub>10</sub>	Yes	✓		
PM <sub>2.5</sub>	Yes	✓		
SO <sub>2</sub>	Yes	✓		
VOC	Yes			✓
NO <sub>x</sub>	Yes	✓		
CO	Yes	✓		
TRS	Yes			✓
H <sub>2</sub> S	Yes			✓
Individual HAP	Yes		✓	
Total HAPs	Yes		✓	✓
Total GHGs	Yes			✓

Note: The facility is granted a Synthetic Minor (SM) Status through Permit Amendment No. 2631-067- 0022- V-03-2 for HAPs emissions so as to become an area source and to avoid the applicability of boiler MACT.

## 3. MACT Standards

The facility is not subject to the new MACT standards for the Pulp and Paper Industry (40 CFR 63 Subpart S) since the facility is a recycling mill that does not utilize bleaching. The facility was potentially subject to 40 CFR 63, Subpart DDDDD, the "Industrial, Commercial, and Institutional Boiler and Process Heater" MACT, because the facility is a major source of HAPs.

Note that now the facility has taken a limits for HAPs emissions to become area source as on January 1, 2016 to avoid the applicability of boiler MACT 5D, and to be subjected to the area source GACT, 40 CFR 63 subpart 6J.

Additional information about the strategy to achieve this is as under:

### HAP Synthetic Minor Compliance Demonstration Plans:

- Conduct periodic HCl stack tests.
- Other individual HAP emissions calculated based on EPA emission factors.
- Total HAP is driven by HCl (from coal).
- Periodic sampling of coal to show consistency in the chlorine content.

- Adjust stack tested HCl rate if coal sampling shows higher chlorine content between stack tests.
- Limit coal use to remain below <10 tons/yr limit.

Condition 2.1.2 of the permit limits the facility to 10/ 25 tons of HAPs emissions.

4. Program Applicability (AIRS Program Codes)

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

## Regulatory Analysis

### II. Facility Wide Requirements

#### A. Emission and Operating Caps:

Currently, permit contains only two conditions; one is carried over from the current permit and the other condition was added by permit amendment No. 2631-067-0022-V-03-2 per details as indicated in table of Section E of this narrative.

“Per U.S. EPA guidance (Reference Memorandum: “Potential to Emit for MACT Standards -- Guidance on Timing Issues”, John S. Seitz, Director, OAQPS, May 16, 1995. Available at: <http://www.epa.gov/region7/air/title5/t5memos/pteguid.pdf>), an existing major HAP source may become a minor (area) source by taking federally enforceable limits on its potential to emit to avoid the applicability of a major source NESHAP, in this case the Boiler MACT. Facilities may switch to area source status at any time until the first compliance date of the standard, which in this case is January 31, 2016 (compliance date of the Boiler MACT).”

The facility has requested Synthetic Minor (SM) status for Hazardous Air Pollutants (HAPs) for the avoidance of 40 CFR 63 subpart DDDDD and to be subjected to the applicability of Subpart JJJJJ.

A facility-wide emission cap included in this permit amendment (No. 2631-067-0022-V-03-2), set to limit emissions of any single hazardous air pollutant (HAP) to less than 10 tons during any twelve consecutive month periods and emissions of and combination of HAPs to less than 25 tons during any twelve consecutive month periods. This limit is set to establish this facility as a synthetic minor source for the avoidance of 40 CFR 63, Subpart DDDDD.

Condition 2.1.2 establishes facility wide limits for HAPs emissions as indicated above as on January 1, 2016 so that facility to become an area source, which is one month prior to the compliance date of January 31, 2016 for Subpart DDDDD.

#### B. Applicable Rules and Regulations

There are no new or modified facility-wide rules and regulations, other than taking a limit for HAPs emissions, which are associated with the modification proposed in Application No. 22611.

Rules and Regulations Assessment –

The following is indicated in the narrative for Permit Amendment No. 2631-067-0022-V-03-2:

**“40 CFR 63 Subpart DDDDD- National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT):** Caraustar operates a 313 MMBtu/hr boiler, which is regulated under the Boiler MACT-Major Source with a compliance date of January 31, 2016 as an existing source.”

However, due to change for major source to area source for HAPs emissions, this rule is not indicated in this permit.

C. Compliance Status

No non-compliance issues. The compliance certification in the Title V permit application is signed.

D. Operational Flexibility

None applicable.

E. Permit Conditions

Condition(s) specified in Section 2.0 of Renewal Permit No. 2631-0022-V-04-0, which includes facility wide emission caps and operating limits, are discussed below.

Existing Permit/Amendment Condition No.	New Permit (Renewal) Condition No.	Comments
P-2.1.1	2.1.1	<b>Condition Unchanged</b> – This condition limits VOC emissions, in order to avoid GA Rule 391-3-1-.02(2)(tt), VOC RACT emissions from Major Sources.
A2-2.1.2	2.1.2	<b>Condition Unchanged</b> – Condition No. 2.1.2 was included (by permit amendment A2) to establish the facility as a minor (area) source of HAP emissions prior to the compliance date of the Boiler MACT (40 CFR 63 Subpart DDDDD): January 31, 2016 as requested by the Permittee. The Synthetic Minor limits are proposed to be effective January 1, 2016 such that the 12-month rolling total emissions for the period ending December 31, 2015 are below the HAP major source thresholds prior to January 31, 2016.

P: Title V Permit No. 2631-067-0022-V-03-0

A1: Permit Amendment No. 2631-067-0022-V-03-1

A2: Permit Amendment No. 2631-067-0022-V-02-2



### III. Regulated Equipment Requirements

#### A. Brief Process Description

A process description is specified in Section I.D.3 of this narrative for Title V Permit No. 2631-067-0022-V-04-0.

#### B. Equipment List for the Process

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
CB01	Coal-Fired Boiler (313 MMBtu/hr, Pulverized coal, natural gas and No.2 fuel oil)	GA391-3-1-.02(2)(d) GA391-3-1-.02(2)(g) GA391-3-1-.02(2)(yy) 40 CFR 60, Subpart D 40 CFR 63 Subpart JJJJJ (effective January 1, 2016)	3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.10 through 3.3.15, 3.4.6, 3.4.7, 3.4.8, 4.2.1, 4.2.2 through 4.2.5, 5.2.1, 5.2.4, 5.2.5, 5.2.6, 5.2.8, 5.2.9, 5.2.10, 6.1.7, 6.2.2, 6.2.13	BH01	Baghouse (Stack ID:ST01)
MT02	Mill #2 Direct Fired Air Heater (23 MMBtu/hr, NG, or No. 2 FO)	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(g)	3.4.1, 3.4.2	None	None (Stack ID:ST02)
SW02	Sweetwater Paperboard Direct-Fired Air Heater (10 MMBtu/hr, Steam, NG, or No. 2 FO)	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(g)	3.4.1, 3.4.2	None	None
MO01	Mill #1 Direct Fired Air Heater (14 MMBtu/hr, Steam, NG or No. 2 FO)	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(g)	3.4.1, 3.4.2	None	None
PH01	Diesel Fueled Emergency Firefighting Pump	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(g) GA391-3-1-.02(2)(yy) 40 CFR 63 Subpart ZZZZ	3.2.1, 3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.3, 6.2.3	None	None
CB02	Fly Ash Storage Silo	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(e)	3.4.1, 3.4.4, 5.2.2, 5.2.7	BH02 BH03	Baghouse (Stack ID:ST10) Baghouse (Stack ID:ST11)
CB03	Bottom Ash Storage Silo	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(e)	3.4.1, 3.4.4, 5.2.4, 5.2.7	BH02 BH03	Baghouse (Stack ID:ST10) Baghouse (Stack ID:ST11)
MO02	Mill #1 Paper Machine	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(e)	3.4.1, 3.4.3	None	None
MT03	Mill #2 Paper Machine	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(e)	3.4.1, 3.4.4	None	None
SW03	Sweetwater Paperboard Paper Machine	GA391-3-1-.02(2)(b) GA391-3-1-.02(2)(e)	3.4.1, 3.4.4	None	None

### C. Equipment & Rule Applicability

Equipment and Rule Applicability for this facility as specified in Permit No. 2631-067-0022-V-04-0 are discussed below:

(1) Equipment and Rule Applicability specified in the initial Title V Permit No. 2631-067-0022-V-01-0 for NO<sub>x</sub> RACT, which were carried over in Permit No. 2631-067-0022-V-02-0 without change, and which were discussed in the initial Title V permit narrative for this permit, are reproduced below. **Note that discussion still hold good and the variation if any is indicated:**

“The Coal-Fired Boiler (CB01) is subject to 40 CFR Part 60, Subpart D since the boiler primarily burns coal, is rated at a capacity greater than 250 MMBtu/hr, and was installed after August 17, 1971. The boiler is rated at 313 MMBtu/hr and was installed in 1982. The boiler also burn #2 fuel oil and natural gas as back-up fuel. The SO<sub>2</sub> emission limit is limited to 1.2 lbs/MMBtu, the particulate matter emissions is limited to 0.10 lb/MMBtu, the opacity limit is 20%, and the NO<sub>x</sub> emissions is limited to 0.5 lb/MMBtu during the period May 1 through September 30 of each year determined on a thirty day rolling average and 0.65 lbs/MMBtu for the remaining year determined on a thirty day rolling average (NO<sub>x</sub> emission limit in permit condition in order to comply with NO<sub>x</sub> RACT-Rule 391-3-1-.02(2)(yy)).”

“ The ABBC Mill #1 Direct Fired Air Heater (MO01), Sweetwater Paper Board Boiler (SW01), and the Sweet water Paper Board Direct Fired Heater (SW02) are subject to Rule 391-3-1-.02(2)(d)2(ii) since the equipment was installed after January 1, 1972 and have rated capacities greater than 10 MMBtu/hr bot less than 250 MMBtu/hr, Rule (d)(30-Fuel Burning Equipment since the equipment was installed after January 1, 1972, and Rule 391-3-1-.02(2)(g)2-Sulfur Dioxide since the equipment was installed after January 1, 21997 and have rated capacities less than 100 MMBtu/hr. Rule (d)2(ii) limits particulate matter emissions based on the equations.” **Note: for equations refer to GA Rule book.**

“Rule (d)3. Limits the opacity to 20% and Rule (g) limits the sulfur content of the fuel oil burned to 2.5 percent sulfur, by weight. The Sweetwater Paper Board Boiler and Direct Fired Heater re subject to Georgia rule 391-1-.02(2)(yy)-NO<sub>x</sub> Emissions from Major Sources.”

**Boiler (MT01) associated conditions have been removed from permit.**

“ The Sweetwater Paper Board Paper Machine (SW03), ABBC Mill #1 Paper Machine (MO02), and ABBC Mill #2 paper machine (MT03) are subject to Rule 391-3-1-.02(2)-Visible Emissions and Rule 391-3-1-.02(2)(e)-Particulate Emissions from Manufacturing Processes. Rule (b) limits the visible emissions to 40% opacity. Since ABBC Mill #1 Paper machine was installed before July 2, 1968, it is classified as existing equipment. Therefore, the particulate matter emissions is limited by Rule (ec0 (ii) with the following equation.” **Note: for equations refer to GA Rule book.**

“Since ABBC Mill #2 Paper Machine and the Sweetwater Paper Board Paper Machine are constructed after July 2, 1968, they are classified as new equipment and are therefore subject to

Rule (e)(i). The particulate matter emissions are limited to the following equation.” **Note: for equations refer to GA Rule book.**

“The Fly Ash Storage Silo (CB02), and Lime Storage Silo (CB04) (**Note that the lime storage silo is not in operation and has been removed**) are subject to Rule 391-3-1-.02(2)(b)- Visible Emissions and Rule 391-3-1-.02(2)(e)-Particulate Emissions from Manufacturing Processes., Rule 9b) limits the visible emissions from each source equal to or less than forty (40) percent. All three storage silos were installed in 1982 and are therefore classified as new equipment in accordance with Rule (e ). The Fly Ash Storage Silo and the Bottom Ash Silo each have a process input rate of 15.5 tons per hour and therefore the particulate matter emissions from each silo are limited by the following equation.” **Note: for equations refer to GA Rule book.**

“Star Tube Paper Printer # 1 and # 2 (PRN1 and PRN2) are potentially subject to Yule (mm)-VOC Emissions from graphic Art Systems. However, the printers are not subject to any Rule (mm) requirements since the VOC emissions from the printers are only 2 tpy (the rule exempts a facility whose VOC emissions from their printers are less than 25 tpy). The facility listed the printers in Section 4.50 because the printers VOC and HAP emissions are insignificant.”

(2) Equipment and Rule Applicability specified in the current Permit No. 2631-067-0022-V-03-0 for NOx RACT, which were discussed in the Title V permit narrative for this permit, is reproduced below. **Note that discussion still hold good and the variation if any is indicated:**

### **NOx RACT**

The facility had requested in the application for Permit No. 2631-067-0022-V-02-0 that several conditions be either deleted or specific emissions unit removed that were placed in the permit because of NOx RACT. The reasons to retain these conditions which were discussed in the narrative for Permit No. 2631-067-0022-V-02-0 and again in narrative for Permit No. 2631-067-0022-V-03-0 are reproduced below.”

“The facility requested in the application that several conditions be either deleted or specific emissions unit removed that were placed in the permit because of NOx RACT. Condition 3.2.1 limits the Diesel Fueled Emergency Firefighting Pump (Source Code: PH01) to 380 hours of operation per year. This condition is in the permit because it is a part of the facility NOx RACT plan dating back to 1994. The Firefighting Pump is in Condition #s **3.4.4, 3.4.5, 4.2.1, 6.2.3**. Therefore, the conditions regarding any NOx RACT could not be changed unless the facility decides to re-examine its entire NOx RACT plan.”

## **Other Applicable Rules and Regulations -**

Boiler CB01 is subject to 40 CFR 63 Subpart JJJJJ – “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources”.

The effective date of the applicability of the Boiler Area Source NESHAP (40 CFR 63 Subpart JJJJJ) as noted above for the coal-fired boiler (CB01) is January 1, 2016, the date upon which the facility switches to area source status.

The Mill #2 Direct Fired Air Heater (MT02), Sweetwater Paperboard Direct-fired Air Heater (SW02), and Mill #1 Direct Fired Air Heater are not subject to the NESHAP because they are not boilers as defined in 40 CFR 63.11237.

Also, as indicated by the Permittee, emission Units MT01 (Mill #2 Boiler) and SW01 (Sweetwater Paperboard Boiler) are no longer operational. MT01 will be removed by the end of 2014, and SW01 will be removed by the end of 2015.

The Spray Dryer (APCD SD01) and associated Lime Silo (Emission Unit CB04) with Baghouse (APCD BH04) are also not operational and will be removed or closed in place by the end of 2014.

Boiler CB01 burns coal as a primary fuel and is subject to the Mercury and Carbon Monoxide emission limits in Table 1 of the subpart. The boiler must comply with the work practice standards and minimize periods of startups and shutdowns.

Also, the facility is subject to the following Georgia Air Quality Rules,

### **1. Georgia Rule 391-3-1-.02(2)(b)—“Visible Emissions”**

This rule limits opacity of emissions from any air contaminant source to forty (40) percent, except in cases where another rule or regulation might make a more stringent requirement. Emission Units of ABB Mill #2 Direct Fired Heater (EU ID No. MT02), the Sweetwater Paperboard Direct-Fired Air Heater (EU ID No. SW02), the Sweetwater Paperboard Paper Machine (EU ID No. SW03), the ABB Mill #1 Direct Fired Heater (Source Code MO01), the ABB Mill #1 Paper Machine (EU ID No. MO02), the ABB Mill #2 Paper Machine (EU ID No. MT03), the Diesel Fueled Emergency Firefighting Pump (Source Code: PH01), the Fly Ash Storage Silo (EU ID No. CB02), the Bottom Ash Storage Silo (EU ID No. CB03) are all subjected to this rule and facility is required to ensure compliance with the 40% opacity limit.

### **3. Georgia Rule 391-3-1-.02(2)(d)—“Fuel-Burning Equipment”**

GA Rule (d) regulates the emissions of fly ash and/or other particulate matter (PM) from "fuel-burning equipment", which is defined as "equipment the primary purpose of which is the production of thermal energy from the combustion of any fuel." Coal fired Boiler (CB01) meet this definition, and is regulated under this rule.

**Coal Fired Boiler CB01:** Boiler CB01 was constructed after January 1, 1972, and so are regulated under division d(2)(iii) of the rule. Therefore, the current permit's particulate matter limitation for this unit, codified in Condition 3.3.1 is 0.10 pounds per MMBtu. As this unit was constructed after January 1, 1972, division 3. of the rule limits their emissions to less than 20% opacity, except for up to one six minute period per hour of up to 27% opacity. As this unit is rated greater than 250 MMBtu/hour each, division 4 of the rule for NOx does apply.

**4. Georgia Rule 391-3-1-.02(2)(e)—“Particulate Emission from Manufacturing Processes”**

GA Rule (e) applies to all particulate generating processes that are not covered by a more specific rule or regulation. Particulate emissions are limited by the equations based on new or existing equipment. Under this rule, the facility's ABB Mill #1 Paper Machine (EU ID No. MO02), ABB Mill #2 Paper Machine (EU ID No. MT03), Fly Ash Storage Silo (EU ID No. CB02), the Bottom Ash Storage Silo (Source Code: CB03), and the Sweetwater Paperboard Paper Machine (Source Code: SW03) are covered. This equipment is subject to the formula-based emission limitations of Rule (e) as codified in Condition 3.4.3 and 3.4.4.

**5. Georgia Rule 391-3-1-.02(2)(g)—“Sulfur Dioxide”**

GA Rule (g) applies to all fuel burning sources, and limits the sulfur content of the fuels used in combustion equipment rated at less than 100 MMBtu/hour to 2.5 percent by weight. The facility's ABB Mill #1 Direct Fired Air Heater (EU ID No. MO01), the Sweetwater Paperboard Direct-Fired Air Heater (EU ID No. SW02), the ABB Mill #2 Direct Fired Air Heater (EU ID No. MT02), and the Diesel Fueled Emergency Firefighting Pump (EU ID No. PH01), are subject to this limitation as codified in Condition 3.4.2. These units combust several fuels, some of which meet this limitation by their definition, and others must demonstrate compliance with this limitation with a combination of sampling and recordkeeping. Natural gas and #2 distillate fuel oil by definition contain less than 2.5% sulfur.

D. Compliance Status

Refer to Section II.C of this narrative.

E. Operational Flexibility

None applicable.

F. Permit Conditions

Requirements for emission units for this facility are discussed as under:

### 3.2: Equipment Emission Caps and Operating Limits

Condition(s) specified in Section 3.2 of Renewal Permit No. 2631-0022-V-04-0, which include equipment-specific emission caps and operating limits, currently contains only one condition as indicated below:

Existing Permit/Amendment Condition No.	Permit Renewal Condition No.	Comments
P-3.2.1	3.2.1	<b>Condition Unchanged</b> – This condition limits the operational hours of firefighting pump to 380 hrs. per year under GA Rule (yy). This is same as existing condition.

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### 3.3 Equipment Federal Rule Standards

Condition(s) specified in Section 3.3 of Renewal Permit No. 2631-0022-V-04-0, which include equipment federal rule standards and carried over from the current permit [# 2631-0022-V-03-0(P)] and permit amendments are discussed below, with changes made to conditions, if any:

Existing Permit/Amendment Condition No.	New Permit (Renewal) Condition No.	Comments
P-3.3.1	3.3.1	<b>Condition Unchanged</b> – This condition limits PM emissions from coal-fired boiler CB01 per 40 CFR 60 Subpart D. This is same as existing condition.
P-3.3.2	3.3.2	<b>Condition Unchanged</b> – This condition limits opacity of emissions from coal-fired boiler CB01 per 40 CFR 60 Subpart D. This is same as existing condition.
P-3.3.3	3.3.3	<b>Condition Unchanged</b> – This condition limits sulfur dioxide emissions from coal-fired boiler CB01 firing coal with and without NG, per 40 CFR 60 Subpart D. This is same as existing condition.
P-3.3.4	3.3.4	<b>Condition Unchanged</b> – This condition limits nitrogen oxides emissions from coal-fired boiler CB01 firing coal, per 40 CFR 60 Subpart D. This is same as existing condition.
P-3.3.5	3.3.5	<b>Condition Unchanged</b> – This condition limits sulfur dioxide emissions from coal-fired boiler CB01 firing No.2 FO and/or NG, per 40 CFR 60 Subpart D. This is same as existing condition.
P-3.3.6	3.3.6	<b>Condition Unchanged</b> – This condition limits nitrogen oxides emissions from coal-fired boiler CB01 firing No. 2

		FO and /or NG, per 40 CFR 60 Subpart D. This is same as existing condition.
P-3.3.7	3.3.7	<b>Condition Unchanged</b> – This condition limits SO <sub>2</sub> and NO <sub>x</sub> emissions from coal fired boiler CB01 burning different fuels simultaneously, per 40 CFR 60 Subpart D. This is same as existing condition.
P-3.3.8	3.3.8	<b>Condition Unchanged</b> – This condition indicates that coal fired boiler CB01 is subject to 60 CFR 60 Subpart A. This is same as existing condition.
P-3.3.9	3.3.9	<b>Condition Unchanged</b> – This condition indicates that coal fired boiler CB01 is subject to 60 CFR 60 Subpart D. This is same as existing condition.
A2-3.3.10 Through A2--3.3.15	3.3.10 Through 3.3.15	<b>Condition Unchanged</b> – Condition 3.3.10 through 3.3.15, which establishes the applicability of boiler area source GACT, 40 CFR 60 Subpart JJJJJ. These conditions specified the emission limits and require the Permittee to comply with all applicable provisions of the 40 CFR 63 Subpart A-General Provisions and Subpart JJJJJ on and after January 1, 2016, which is one month prior to the compliance date of January 31, 2016 for Subpart DDDDD. These conditions were included by permit amendment A2.
NA	3.3.16	<b>New Condition</b> – This new condition specify that firefighting pump is subject to 40 CFR 60 Subpart ZZZZ.
NA	3.3.17	<b>New Condition</b> – This new condition specify that firefighting pump be operated and maintained, per rule of 40 CFR 63.

### 3.4 Equipment SIP Rule Standards

Condition(s) specified in Section 3.4 of Renewal Permit No. 2631-0022-V-04-0, which include equipment SIP rule standards, and carried over from the current permit [# 2631-0022-V-03-0(P)] and permit amendments are discussed below, with changes made to conditions, if any:

Existing Permit/Amendment Condition No.	New Permit (Renewal) Condition No.	Comments
P-3.4.1 Through P-3.4.3	NA	<b>Condition Deleted</b> – Conditions 3.4.1, 3.4.2, and 3.4.3: Emission units of Mill #2 Boiler (MT01) and Sweetwater Paperboard Boiler (SW01) are no longer operational. MT01 will be removed by the end of 2014, and SW01 will be removed by the end of 2015. Therefore, these conditions were obsolete and hence deleted by permit amendment A2 as requested by the Permittee.

P-3.4.4	3.4.1	<b>Condition Unchanged</b> - Condition 3.4.4 was modified to remove the reference of the Lime Storage Silo (EU ID No. CB04), which is not operational, by permit amendment A2. This condition is renumbered.
P-3.4.5	3.4.2	<b>Condition Unchanged</b> - Condition 3.4.5 was modified to remove the references of the Emission units of Mill #2 Boiler (MT01) and Sweetwater Paperboard Boiler (SW01), which are not operational, by permit amendment A2.
P-3.4.6	3.4.3	<b>Condition Unchanged</b> – This condition limits PM emissions from ABB Mill # 1 (EU ID No. MO02) per GA Rule (e). This is same as existing condition, renumbered
P-3.4.7	3.4.4	<b>Condition Unchanged</b> – This condition limits PM emissions from emission units (EU ID Nos. MT03, CB02, CB03and SW03) per GA Rule (e). This is same as existing condition, renumbered
P-3.4.8	NA	<b>Condition Deleted</b> – Condition 3.4.8 was deleted as the Spray Dryer (APCD SD01) and associated Lime Silo (Emission Unit CB04), which are not operational, by permit amendment A2.
P-3.4.9	3.4.5	<b>Condition Unchanged</b> – This condition limits NOx emissions from Coal fired Boiler (EU ID No. CB01), per GA Rule (yy). This is same as existing condition, renumbered
P-3.4.10	3.4.6	<b>Condition Unchanged</b> – This condition specify to inspect CB01 burners and make repair as necessary, per GA Rule (yy). This is same as existing condition, renumbered
P-3.4.11	3.3.7	<b>Condition Unchanged</b> – This condition specify to inspect and document burner throat repairs of CB01, per GA Rule (yy). This is same as existing condition, renumbered
P-3.4.12	3.3.8	<b>Condition Unchanged</b> – This condition specify to perform preventive maintenance on pulverizers and classifiers every 1000 hrs of operation, per GA Rule (yy). This is same as existing condition, renumbered
P-3.4.13	NA	<b>Condition Deleted</b> – Condition 3.4.13 is deleted, as the Emission units MT01 (Mill #2 Boiler) and SW01 (Sweetwater Paperboard Boiler), which are no longer operational, by permit amendment A2.



#### 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

Testing requirements specified in Permit No. 2631-0022-V-04-0 were carried over from the current permit [# 2631-0022-V-03-0 (P)] and permit amendments are discussed below, with changes made to conditions, if any:

Existing Permit/Amendment Condition No.	Permit Renewal Condition No.	Comments
P-4.1.3	4.1.3	<p><b>Condition Unchanged</b> - Subpart k (4.1.3k.), which incorporates the reference test method for CO emissions, was added as a part of permit amendment A2. The facility is to use Method 10 for the determination of Carbon Monoxide concentrations.</p> <p>Subpart l (4.1.3l and 4.1.3m.), is added as a part of A2 amendment. The facility is to use Method 29, 30A, 30 B or 101A for the determination of Mercury concentrations, and 26A for HF and HCl.</p>
A2-4.1.4	4.1.4	<b>Condition Unchanged</b> - Condition 4.1.4, which is a new template condition, was added as a part of A2 amendment.
P-4.2.1	4.2.1	<b>Condition Unchanged</b> - Condition 4.2.1a was modified by permit amendment A2, to address a typographical error (NO <sub>x</sub> should be referred to as nitrogen oxides throughout the permit.)
A2-4.2.2 Through A2-4.2.5	4.2.2 Through 4.2.5	<b>Condition Unchanged</b> - Conditions 4.2.2, 4.2.3, 4.2.4 and 4.2.5 were included, by permit amendment A2, to implement the requirements of the Boiler Area Source NESHAP (40 CFR 63 Subpart JJJJJ) as of January 1, 2016. These conditions are included to implement a test program to confirm emission limits and the HCl emission factor for the Coal-Fired Boiler (EU ID No. CB01).

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A1: Permit Amendment No. 2631-067-0022-V-03-1

A2: Permit Amendment No. 2631-067-0022-V-02-2

## 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

Monitoring requirements specified in Permit No. 2631-0022-V-04-0, carried over from the current permit (#2631-0022-V-03-0) and permit amendments, are discussed below with changes made to conditions, if any:

Existing Permit/Amendment Condition No.	Permit Renewal Condition No.	Comments
P-5.2.1	5.2.1	<b>Condition Unchanged</b> - Condition 5.2.1 was modified to address a typographical error (A2). NOx should be referred to as nitrogen oxides throughout the permit (A2).
P-5.2.2 And P-5.2.3	NA	<b>Conditions Deleted</b> -Conditions 5.2.2 and 5.2.3 were deleted by permit amendment A2, as the Spray Dryer (APCD SD01) and associated Lime Silo (Emission Unit CB04) with Baghouse (APCD BH04) are not operational and will be removed or closed in place by the end of 2014 as indicated by the Permittee,
P-5.2.4	5.2.2	<b>Condition Unchanged</b> - Condition 5.2.4 was modified (subpart 5.2.4a. is deleted) to remove the references of Spray Dryer (APCD SD01) and associated Lime Silo (Emission Unit CB04) with Baghouse (APCD BH04), which are not operational as indicated by the Permittee, by permit amendment A2. This condition is renumbered.
P-5.2.5	5.2.3	<b>Condition Unchanged</b> – This condition requires the facility to operate a timer on the fire water pump in order to provide the appropriate data to show compliance with the 380-hr operating limit on the fire-water pump in Condition 3.2.1. This condition is renumbered.
P-5.2.6	5.2.4	<b>Condition Unchanged</b> – Condition 5.2.6 lists the pollutant specific emissions units (PSEUs) subject to 40 CFR 64 CAM for PM and SO <sub>2</sub> . This condition is renumbered.

P-5.2.7	5.2.5	<b>Condition Unchanged</b> - Condition 5.2.7 elucidates compliance with CAM for the Coal-Fired Boiler CB01 with respect to sulfur dioxide. This condition is renumbered.
P-5.2.8	5.2.6	<b>Condition Unchanged</b> - This condition elucidates compliance with CAM for the Coal-Fired Boiler CB01 with respect to particulate matter. This condition is renumbered.
P-5.2.9	5.2.7	<b>Condition Unchanged</b> - This condition explicates compliance with CAM for the Ash handling System with respect to particulate matter. This condition is renumbered.
P-5.2.10	-	<b>Conditions Deleted</b> - Condition 5.2.10 related to compliance with CAM for the Lime Silo CB04 with respect to particulate matter, was deleted by permit amendment A2
P-5.2.11 And P-5.2.12	NA	<b>Conditions Deleted</b> - There were no such conditions in the permit P or permit amendment A1 and A2. This was a typo in numbering, hence considered deleted..
A2-5.2.13 And A2-5.2.14	5.2.8 And 5.2.9.	<b>Condition Unchanged</b> - Conditions 5.2.13 and 5.2.14 were included to implement the requirements of the Boiler Area Source NESHAP (40 CFR 63 Subpart JJJJJ) as of January 1, 2016, by permit amendment A2. These conditions are renumbered.
A2-5.2.15	5.2.10	<b>Condition Unchanged</b> - Condition 5.2.15 was included to keep records of the fuel fired and to implement the HAP Synthetic Minor emissions tracking, by permit amendment A2.this condition is renumbered.

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A1: Permit Amendment No. 2631-067-0022-V-03-1

A2: Permit Amendment No. 2631-067-0022-V-02-2

### C. Compliance Assurance Monitoring (CAM)

The discussions for CAM monitoring requirements specified in Permit No. 2631-0022-V-04-0, carried over from the current permit (#2631-0022-V-03-0) and permit amendments and explained in the above table, are as below:

The narrative for initial Title V Permit No. 2631-0022-V-01-0 indicates the following regarding CAM monitoring:

“The facility has identified four pollutant specific emission units (PSEUs) that are subject to CAM. They are listed in Condition 5.2.4 and are as follows with their specific pollutant(s) and control devices:

<b>Emission Unit</b>	<b>Pollutant</b>	<b>Control Device</b>
Coal-Fired Boiler (Source Code CB01)	Particulate Matter	Baghouse (BH01)
Coal-Fired Boiler (Source Code CB01)	Sulfur dioxide	<del>Spray Dryer</del>
Ash Handling System (Fly Ash Storage Silo(Source Code CB02) and Bottom Ash)	Particulate Matter	Baghouses (BH02 and BH03)
<del>Lime Silo (Source Code CB04)</del>	<del>Particulate Matter</del>	<del>Baghouse (BH04)</del>

Coal-Fired Boiler is listed twice because it has two specific pollutants that are subject to CAM, particulate matter and sulfur dioxide. The emission units are subject to CAM primarily because (1) they are subject to an emission standard for which there is a Part 64 control device and (2) the pre-controlled potential emission rate for each PSEU is greater than 100 tpy.

The Coal-Fired Boiler has two pollutants subject to CAM sulfur dioxide and particulate matter. The primary indicator of proper control device operation for sulfur dioxide is an SO<sub>2</sub> continuous emission monitoring system (CEMS). For particulate matter, a continuous opacity monitoring system (COMS) is the primary indicator.

The Ash Handling System consists of two emission units, the Fly Ash Storage Silo (Source Code CB02) and the Bottom Ash Storage Silo (Source Code CB03), which can be controlled by the same control devices, Baghouses BH02 and BH03. The Ash Handling System has a single major pollutant subject to CAM. The primary indicator for the ash handling system is a daily visible emission check of the baghouses. Secondary indicators are routine operational and maintenance checks.”

The latest position is that Lime silo (EU ID No. CB04) has been removed as is not operational and will be removed per Permittee. Accordingly, the references for the unit and control device has been removed from the various conditions as indicated in the above table.

CAM requirements were carried over without change and specified in subsequent Title V Renewal Permit 2631-067-0022-V-04-0 Note that changes made by permit amendment No. 2631-067-0022-V-03-2, have been incorporated in this permit renewal.

## 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 [quarterly or semiannual] basis.

Template Conditions 6.1.3 and 6.1.4 were updated in September 2011 to allow ~60 days to submit periodic reports. Alternative reporting deadlines are allowed per 40 CFR 70.6, 40 CFR 60.19(f) and 40 CFR 63.10(a).

### B. Specific Record Keeping and Reporting Requirements

Record keeping and reporting requirements specified in Permit No. 2631-0022-V-04-0, carried over from the current permit (#2631-0022-V-03-0) and permit amendments, are discussed below with changes made to conditions, if any:

Existing Permit/Amendment Condition No.	Permit Renewal Condition No.	Comments
P-6.1.7	6.1.7	<b>Condition Unchanged</b> – Section 6.1.7a.iii. was modified to address a typographical error (A2). NOx should be referred to as nitrogen oxides throughout the permit.  New subpart iv. was added in Section 6.1.7a. to implement HAP Synthetic Minor emission reporting, by permit amendment A2
P-6.2.1	6.2.1	<b>Condition Unchanged</b> – This condition requires the Permittee to maintain monthly records for VOC containing materials.
P-6.2.2	6.2.2	<b>Condition Unchanged</b> - This condition requires the Permittee to calculate monthly VOC emissions.
P-6.2.3	6.2.3	<b>Condition Unchanged</b> - This condition requires the Permittee to record for operating hours for firefighting pump.
P-6.2.4	6.2.4	<b>Condition Unchanged</b> - This condition requires the Permittee to maintain certain records.
P-6.2.5	6.2.5	<b>Condition Unchanged</b> - This condition requires the Permittee to verify distillate fuel oil.
P-6.2.6 And A1-6.2.7	6.2.6	<b>Condition Unchanged</b> - Conditions 6.2.6 and 6.2.7 require the Permittee calculating and reporting the annual emissions of VOC in order to verify compliance with Condition 2.1.1. Condition 6.2.7 was revised by A1 for reporting deadlines.

A2-6.2.8 Through A2-6.2.10	6.2.8 Through 6.2.10	<b>Conditions Unchanged</b> – Conditions 6.2.8, 6.2.9 and 6.2.10 were included to implement the requirements of various notifications of the Boiler Area Source NESHAP (40 CFR 63 Subpart JJJJJ) as of January 1, 2016, by permit amendment A2.
A2-6.2.11 and A2-6.2.12	6.2.11 Through 6.2.12	<b>Conditions Unchanged</b> – Conditions 6.2.11 and 6.2.12 were included to implement HAPs SM emission recordkeeping requirements, by permit amendment A2.
A2-6.2.13 and A2-6.2.14	6.2.13 Through 6.2.14	<b>Conditions Unchanged</b> – Conditions 6.2.13 and 6.2.14 were included to submit certain notifications per requirements of 40 CFR 63 Subpart JJJJJ, by permit amendment A2.

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A1: Permit Amendment No. 2631-067-0022-V-03-1

A2: Permit Amendment No. 2631-067-0022-V-02-2

## VII. Specific Requirements

### A. Operational Flexibility

None applicable.

### B. Alternative Requirements

None applicable.

### C. Insignificant Activities

Refer to <http://airpermit.dnr.state.ga.us/GATV/default.asp> for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

### D. Temporary Sources

None applicable.

### E. Short-Term Activities

The facility uses portable generators when the electrical substation or the internal power grid is down for maintenance to supply electricity. The facility expects that the portable generators would only be used for less than one week a year.

When Coal Fired Boiler CB01 is down for maintenance, the facility brings in temporary portable natural gas fired boilers to supply steam. The facility expects that the portable boilers would only be used for less than one week a year.

F. Compliance Schedule/Progress Reports

None applicable.

G. Emissions Trading

None applicable.

H. Acid Rain Requirements

None applicable.

I. Stratospheric Ozone Protection Requirements

None applicable.

J. Pollution Prevention

None applicable.

K. Specific Conditions

None 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.