Facility Name: **Georgia-Pacific Consumer Operations LLC – Savannah River Mill**
City: Rincon
County: Effingham
AIRS #: 04-13-103-00007

Application #: TV-44103 and TV-200144
Date Application Received: March 24, 2017 and December 1, 2017
Permit No: 2621-103-0007-V-05-0

Program	Review Engineers	Review Managers
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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:Georgia-Pacific Consumer Operations LLC – Savannah River Mill

2. Parent/Holding Company Name

Georgia-Pacific Consumer Operations LLC

3. Previous and/or Other Name(s)

Fort Howard Corporation
Fort James Savannah River Mill
Georgia-Pacific Corporation – Savannah River Mill
*Georgia-Pacific Consumer Products LP – Savannah River Mill.

*The facility submitted an application for a name/ownership change under TV-200144, which is incorporated into this renewal application.

4. Facility Location

The facility is located at 437 Old Augusta Road South, Rincon, Georgia 31326.

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

The facility is located in an attainment area.

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
2621-103-0007-V-04-0	September 25, 2012	Title V Renewal Permit
2621-103-0007-V-04-1	August 14, 2013	Installation of stationary reciprocating internal combustion engines
Off-Permit Change	October 2013	Installation of converting line to be a part of existing CONV operations

Off-Permit Change	March 2014	Replacement of suction forming rolls on Paper Machines 16 and 17 (PM01 and PM02)
Off-Permit Change	March 2014	Upgrades and improvements to processes and equipment used in converting towel lines
Off-Permit Change	June 2014	Trial to burn activated sludge from WWTP in power boilers as an alternative fuel
2621-103-0007-V-04-2	June 27, 2014	Administrative amendment for address change
Off-Permit Change	July 2014	Improvements to Paper Machine 20 (PM05)
Off-Permit Change	September 2014	Permanent replacement of engine associated with Combustion Turbine Generating Train (CT02)
Off-Permit Change	January 2015	Improvements to Paper Machine 19 (PM04)
2621-103-0007-V-04-3	January 21, 2015	Installation of new converting line
2621-103-0007-V-04-4	July 6, 2015	Venting of trim removal system to atmosphere
Off-Permit Change	July 2015	Removal of Flexographic Printer No. 1 (FX01)
Off-Permit Change	March 2016	Removal of Flexographic Printer No. 2 (FX02)
Off-Permit Change	March 2016	Replacement of primary arms on Paper Machine 20 (PM05)
2621-103-0007-V-04-5	March 31, 2016	Inclusion of normal operating ranges for pressure drop and scrubbant flow rate of two new scrubbers (SB09 and SB10)
2621-103-0007-V-04-6	May 16, 2016	Installation of new dust collection system and scrubber
Off-Permit Change	August 2016	Upgrades and improvements to No. 3 Power Boiler
Off-Permit Change	November 2016	Improvements to Paper Machine 16 (PM01)
Off-Permit Change	January 2017	Update and extension of WWTR trial
2621-103-0007-V-04-7	February 14, 2017	Installation of two 144-hp diesel engines
2621-103-0007-V-04-8	April 5, 2017	Installation of two rental natural gas boilers (<100 MMBtu/hr)
Off-Permit Change	July 2017	Update and extension of WWTR trial
Off-Permit Change	July 2017	Removal of Flexographic Printer No. 3 (FX03)
2621-103-0007-V-04-9	October 3, 2017	Revision of compressor engine (CE01) permit conditions
Off-Permit Change	October 2017	Installation of a napkin converting line
Off-Permit Change	January 2018	Improvements to Paper Machine 20 (PM05)

D. Process Description

1. SIC Codes(s)

2621 – Paper 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)

The facility manufactures tissue, towels, and napkins from recycled wastepaper and/or virgin pulp.

3. Overall Facility Process Description

Pulp and Bleaching
Pulp is manufactured from various grades of wastepaper. The pulp processing area pulps, deinks, cleans, and bleaches wastepaper to a specific level of brightness determined by product and customer specifications. The breakdown of wastepaper occurs in the agitation process inside high consistency batch or continuous drum pulpers when combined with water. During the pulping stage, the wastepaper breaks down into a slurry (referred to as stock or pulp).

The stock is then passed to a screening system that removes plastic, latex, sand, clay, metal, and other contaminants. After the removal of the larger contaminants, coatings, ash and inks are removed from the stock by washing and deinking. These cleaning/screening processes help prevent these contaminants from being included in the final tissue, towel, and napkin products. The stock may then be bleached using sodium borohydride, sodium hydrosulfide, and hydrogen peroxide. The final stage of bleaching is washing the stock to remove residual chemicals. This stock is pumped to storage tanks for use on the paper machines.

The mill is also capable of using purchased virgin pulp to meet various paper quality and customer specifications. The purchased virgin fiber is added to the pulpers along with the recycle furnish (wastepaper).

Paper Machines
Pulp stock is processed through one of five paper machines to produce commercial and retail grades of tissue, towel, and napkins. Various chemical additives are used when processing the pulp stock to give the finished product different properties required for each product. Examples include the use of wet strength resin in paper towels to make the product strong when wet, or release agents that help prevent the product from sticking to the Yankee dryer roll as it is processed on the paper machine. Chemical cleaning agents are used on the paper machine clothing to remove the buildup of contaminants (e.g. stickies) that form over time from the use of secondary fiber.

Each of the paper machines has a steam-heated Yankee dryer section to reduce the moisture content of the product before it is removed from the paper machine on the associated wind-up reel. Each paper machine also has a hood system that contains two gas-fired burners that supply heat to assist in drying the paper sheet. Paper Machine Nos. 16 and 17 have after-dryers that use steam to complete the final drying step for the finish paper product.

Converting and Printing
The finished paper rolls from the paper machines are sent to the converting area where the paper is converted to tissue, towel, and napkin products. Some of the parent rolls may be printed on flexographic printers prior to conversion into finished products. This area of the mill also uses purchased core stock to form the core material used for toilet paper and paper towel rolls. The finished paper products are packaged and prepared for off-site shipment via truck.

Utilities
The facility operates a number of combustion units to provide steam and electrical power to the production operations. There are three primary power boilers and two combustion turbines with waste heat boilers.

Each of the three power boilers has a heat input rating of 422 MMBtu/hr and is equipped with a baghouse to control particulate matter emissions and a limestone injection system to control sulfur dioxide emissions. Boiler Nos. 3 and 5 are circulating fluidized bed boilers, and Boiler No. 4 is a fluidized bed boiler. Steam from the three power boilers feeds a common header, which serves two steam turbine generators that are each rated at 45 MW of electrical power. The power boilers are permitted to fire a number of different fuels including: petroleum coke; bituminous coal; peat; No. 2 fuel oil; natural gas; wood; wastewater treatment residuals (WWTR); and tire-derived fuel (TDF).

The facility maintains several different outdoor storage piles for coal, petroleum coke, and limestone that are fed as fuels or chemical reduction agents (limestone) into the boilers. These materials are delivered to the mill by railcar or by truck and are transported to the storage piles with the use of mechanical conveyors. The coal and petroleum coke are processed through a granulator to obtain the proper size for firing before these materials are sent to storage silos. The coal, petroleum coke, and limestone are then fed to the boilers from the storage silos. Boiler No. 4 is also equipped with a fuel dryer for each of the four fuel delivery trains to the boiler to remove moisture from the petroleum coke before it is fired in the boilers. The bottom and fly ash from the boilers is collected in storage silos and sent to the mill's on-site landfill or used for beneficial reuse as approved by the appropriate regulatory agencies. Sand is used in the power boilers as a bed material and is stored in a bin.

Additional steam and electrical power are provided to the mill via two combustion turbines that are each equipped with a waste heat boiler. The turbines may also generate power that can be sold to the local utility grid. Combustion Turbine Nos. 1 and 2 can generate 23 and 27 MW of power, respectively. Each waste heat boiler burner is rated at 85.9 MMBtu/hr. The combustion turbines are capable of firing natural gas or No. 2 fuel oil and the waste heat boilers are capable of burning natural gas. The waste heat boilers cannot be operated independently of the turbines.

Ancillary Operations
In addition to main process operations, there are other ancillary operations at the mill with the potential to generate air emissions. The mill operates a wastewater treatment plant to process the wastewater from the pulp processing and the paper machines areas. The wastewater treatment residuals and boiler ash may be landfilled on site, beneficially reused as approved by the appropriate regulatory agencies, or burned in the boilers as approved by appropriate regulatory agencies (WWTR only). Portions of the gases generated from the breakdown of organic matter in the closed portions of the sludge disposal landfill are collected and combusted in a flare.

The mill grinds wooden pallets for use as boiler fuel and paper cores for recycling back into the pulping process. A number of raw materials necessary to the processes are stored in tanks. The mill also has a number of reciprocating internal combustion (RICE) engines onsite, including engines designated for emergency and temporary use

Warehouse
In addition to the main production facility, a separate division of Georgia-Pacific, North American Consumer Products Distribution owns a warehouse across the street from the Savannah River Mill. The Rincon warehouse stores some of the final products produced at the mill, as well as products from other locations. With the exception of an emergency fire pump engine and small diesel tanks, there are no regulated sources of emissions at the warehouse.

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 Savannah River Mill is considered a major source under PSD. The facility has accepted the following PSD Limits:

a. Emissions of SO_2 from Boiler No. 3 are limited to 491.4 pounds per hour.
b. Emissions of NO_X from Boiler Nos. 3, 4, and 5 are limited to 0.4 pounds per MMBtu heat input.
c. Emissions of SO_2 from Boiler Nos. 4 and 5 are limited to 381.5 pounds per hour each.
d. Emissions of NO_X from each combined Combustion Turbine / Waste Heat Boiler stack are limited to 105.0 pounds per hour.
e. The sulfur content of the no. 2 fuel oil burned at the mill is limited to 0.05 percent, by weight, or less.
f. The mill may burn only natural gas in the Paper Machine dryer burners.
g. Emissions of VOC from the Paper Machines combined are limited to less than 206.3 tons per year.
h. Emissions of VOC from Paper Machine No. 20 are limited to 0.0067 pound per MMBtu heat input.
i. The mill was required to install low NO_X burners in the dryer hoods for Paper Machine No. 17.

j. Emissions from Paper Machine No. 17 are limited to 0.005 pounds per MMBtu heat input of PM/PM_{10}, 0.0007 pounds per MMBtu heat input of SO_2, 0.036 pounds per MMBtu heat input of NO_X, 0.184 pounds per MMBtu heat input of CO, and 0.006 pounds per MMBtu heat input of VOC.
k. Emissions of PM/PM_{10} from Paper Machine Nos. 16 through 19 are limited to less than 17.9 tpy, 16.8 tpy, 10.7 tpy, and 5.6 tpy, respectively.
l. Emissions of VOC from the combined Pulp Processing Area and Bleaching Systems are limited to less than 201.3 tpy.
m. The mill must comply with a good operating practices plan for the Sodium Bisulfite Tank.

The facility has accepted the following limits to avoid PSD:

a. The mill must limit the sulfur content of fuel oil burned at the site to 0.05 percent, by weight.
b. The mill must limit the size of Compressor Engines operated under Source Code CE01 to less than 750 hp.
c. The mill must limit the operation of engines under Source Code CE01 to 7,000,000 hp-hours combined.

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}	✓	✓		
SO_2	✓	✓		
VOC	✓	✓		
NO_x	✓	✓		
CO	✓	✓		
TRS	✓	✓		
H_2S	✓	✓		
Individual HAP	✓	✓		
Total HAPs	✓	✓		

3. MACT Standards

The flexographic printers are subject to 40 CFR 63 Subpart KK – National Emission Standards for the Printing and Publishing Industry.

The converting department is subject to 40 CFR 63 Subpart JJJJ – National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating due to the use of glues in the finishing process.

The combustion turbines are subject to 40 CFR 63 Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. There are no specific emission standards that the combustion turbines must meet.

The mill operates engines that are subject to 40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The fluidized bed boilers and rental boilers are subject to 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	Yes
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: None Applicable.

C. Compliance Status: Not Applicable.

D. Permit Conditions: None Applicable.

III. Regulated Equipment Requirements

A. 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**
BO01	Boiler No. 3 (Circulating Fluidized Bed)	40 CFR Part 52.21 40 CFR 60 Subpart D 40 CFR 60 Subpart Db 40 CFR 63 Subpart DDDDD 40 CFR 64 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.2, 3.2.3, 3.2.5, 3.3.1, 3.3.3, 3.3.4, 3.3.6 through 3.3.8, 3.3.23 through 3.3.26, 3.4.3, 3.4.6, 4.2.1, 4.2.5 through 4.2.7, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.8 through 5.2.11, 5.2.13, 5.2.15 through 5.2.19, 6.1.7, 6.2.2, and 6.2.4 through 6.2.6 and 6.2.27*	LS01 BH01	Limestone Feed System Baghouse
BO02	Boiler No. 4 (Bubbling Fluidized Bed)	40 CFR Part 52.21 40 CFR 60 Subpart Db 40 CFR 63 Subpart DDDDD 40 CFR 64 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.2, 3.2.4, 3.2.5, 3.3.1 3.3.2, 3.3.3, 3.3.5 through 3.3.8, 3.3.23 through 3.3.26, 3.4.4, 4.2.1, 4.2.5 through 4.2.7, 5.2.1, 5.2.2, 5.2.3, 5.2.5 through 5.2.11, 5.2.13, 5.2.15 through 5.2.19, 6.1.7, 6.2.2, 6.2.3, 6.2.5, 6.2.6, and 6.2.27*	LS02 BH02	Limestone Feed System Baghouse
BO03	Boiler No. 5 (Circulating Fluidized Bed)	40 CFR Part 52.21 40 CFR 60 Subpart Db 40 CFR 63 Subpart DDDDD 40 CFR 64 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.2, 3.2.4, 3.2.5, 3.3.1, 3.3.3, 3.3.5 through 3.3.8, 3.3.23 through 3.3.26, 3.4.5, 3.4.6, 4.2.1, 4.2.5 through 4.2.7, 5.2.1, 5.2.2, 5.2.3, 5.2.5 through 5.2.11, 5.2.13, 5.2.15 through 5.2.19, 6.1.7, 6.2.2, 6.2.3, 6.2.4 through 6.2.6, and 6.2.27*	LS03 BH03	Limestone Feed System Baghouse
CT01 CT02	Combustion Turbine No. 1 Combustion Turbine No. 2	40 CFR Part 52.21 40 CFR 60 Subpart GG	3.2.2, 3.2.6, 3.3.9, 3.3.10, 3.4.7, 3.4.8, 5.2.1 through 5.2.4, 6.1.7, 6.2.2, and 6.2.7*	None	None
WHB1 WHB2	Waste Heat Boiler No. 1 Waste Heat Boiler No. 2	40 CFR Part 52.21 40 CFR 63 Subpart DDDDD 391-3-1-.02(2)(d)	3.2.2, 3.2.6, 3.3.1, 3.4.7, 3.4.8, 3.4.9, 5.2.1, 5.2.3, 5.2.4, 6.1.7, 6.2.2, and 6.2.7*	None	None
PULP	Pulp Processing Area	40 CFR Part 52.21	3.2.7, 6.1.7, and 6.2.11 through 6.2.14*	None	None
FP05 FP06 FP08	Bleaching System No. 2 Bleaching System No. 3 Bleaching System No. 4	40 CFR Part 52.21	3.2.7, 6.1.7, 6.2.11, 6.2.12, 6.2.13, and 6.2.14*	None	None
BT01	Sodium Bisulfite Tank	40 CFR Part 52.21	3.2.8 and 6.2.15*	None	None
PM01	Paper Machine No. 16	40 CFR Part 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.2.9, 3.2.12, 3.2.13, 3.4.1, 3.4.2, 5.2.3, 6.1.7, 6.2.7, 6.2.8, and 6.2.12 through 6.2.14*	None	None

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
PM02	Paper Machine No. 17	40 CFR Part 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.2.9, 3.2.10, 3.2.12, 3.2.13, 3.4.1, 3.4.2, 5.2.3, 6.1.7, 6.2.7, 6.2.8, and 6.2.12 through 6.2.14*	None	None
PM03	Paper Machine No. 18	40 CFR Part 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.2.9, 3.2.12, 3.2.13, 3.4.1, 3.4.2, 5.2.3, 6.1.7, 6.2.7, 6.2.8, and 6.2.12 through 6.2.14*	None	None
PM04	Paper Machine No. 19	40 CFR Part 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.2.9, 3.2.12, 3.2.13, 3.4.1, 3.4.2, 5.2.3, 6.1.7, 6.2.7, 6.2.8, and 6.2.12 through 6.2.14*	SB04 SB11	Venturi Scrubber Venturi Scrubber
PM05	Paper Machine No. 20	40 CFR Part 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.2.11 through 3.2.13, 3.4.1, 3.4.2, 5.2.3, 6.1.7, 6.2.7, 6.2.9, 6.2.10, and 6.2.12 through 6.2.14*	None	None
CONV	Converting Operation	40 CFR Part 52.21 40 CFR 63 Subpart JJJJ 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.11 through 3.3.13, 3.4.1, 3.4.2, 4.2.2, 5.2.3, 6.1.7, 6.2.16, and 6.2.17*	SB06 SB07 SB09 SB10	Venturi Scrubber Venturi Scrubber Venturi Scrubber Venturi Scrubber
FX05 FX06	Flexographic Printer No. 5 Flexographic Printer No. 6	40 CFR 63 Subpart KK	3.3.14, 3.3.15, 6.1.7, and 6.2.18*	None	None
SHS	Granulator	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, and 3.4.2*	None	None
FS01	Fuel Silo No.1 – Boiler No. 3	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH11	Baghouse
FS02	Fuel Silo No. 2 – Boiler No. 3	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH12	Baghouse
FS03	Fuel Silo No. 3 – Boiler No. 3	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH13	Baghouse
FS04	Fuel Silo No. 1 – Boiler No. 4	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH15	Baghouse
FS05	Fuel Silo No. 2 – Boiler No. 4	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH16	Baghouse
FS06	Fuel Silo No. 3 – Boiler No. 4	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH17	Baghouse
FS07	Fuel Silo No. 4 – Boiler No. 4	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH18	Baghouse
FS08	Fuel Silo No. 1 – Boiler No. 5	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH20	Baghouse
FS09	Fuel Silo No. 2 – Boiler No. 5	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH21	Baghouse
FS10	Fuel Silo No. 3 – Boiler No. 5	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16, 3.3.17, 3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH22	Baghouse

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
FD01	Fuel Dryer No. 1 – Boiler No. 4	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16 through 3.3.18, 3.4.1, 3.4.2, 4.2.3, 5.2.2, 5.2.3, 5.2.11, 5.2.12, and 6.1.7*	BH24	Baghouse
FD02	Fuel Dryer No. 2 – Boiler No. 4	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16 through 3.3.18, 3.4.1, 3.4.2, 4.2.3, 5.2.2, 5.2.3, 5.2.11, 5.2.12, and 6.1.7*	BH25	Baghouse
FD03	Fuel Dryer No. 3 – Boiler No. 4	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16 through 3.3.18, 3.4.1, 3.4.2, 4.2.3, 5.2.2, 5.2.3, 5.2.11, 5.2.12, and 6.1.7*	BH26	Baghouse
FD04	Fuel Dryer No. 4 – Boiler No. 4	40 CFR 60 Subpart Y 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.16 through 3.3.18, 3.4.1, 3.4.2, 4.2.3, 5.2.2, 5.2.3, 5.2.11, 5.2.12, and 6.1.7*	BH27	Baghouse
LM01	Limestone Silo No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH14	Baghouse
LM02	Limestone Silo No. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH19	Baghouse
LM03	Limestone Silo No. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.11, 5.2.12, and 6.1.7*	BH23	Baghouse
CE01	Compressor Engines	40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR 60 Subpart IIII	3.2.14, 3.2.15, 3.3.19, 3.3.20, 3.4.1, 3.4.10, 5.2.14, 6.1.7, 6.2.19, and 6.2.20*	None	None
ME01	Murphy Engine 1	40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	3.3.20, 3.4.2, and 3.4.11*	None	None
ME02	Murphy Engine 2	40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	3.3.20, 3.4.2, and 3.4.11*	None	None
RGB01	Rental Gas Boiler 1	40 CFR 60 Subpart Dc 40 CFR 63 Subpart DDDDD 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.3.21, 3.3.22, 3.4.12, 3.4.13, 4.2.4, and 6.2.21 through 6.2.26*	None	None
RGB02	Rental Gas Boiler 2	40 CFR 60 Subpart Dc 40 CFR 63 Subpart DDDDD 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.3.21, 3.3.22, 3.4.12, 3.4.13, 4.2.4, and 6.2.21 through 6.2.26*	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.

B. Equipment & Rule Applicability

Emission and Operating Caps:

The facility is allowed to sell only one-third of its potential electrical output capacity. This limit is for the avoidance of 40 CFR 60 Subpart Da and the avoidance of Acid Rain provisions.

Boiler No. 3 (Source Code BO01) and Boiler No. 5 (Source Code BO03) are capable of burning TDF. Each boiler is limited to burning no more than 84 tons per day. This limit was based on trial burns performed on Boiler No. 3 on May 8-12, 1991. The boiler did not exceed NO_X, SO_2, PM, and opacity limits at that rate and the rate was incorporated into the permit.

Emission and operating caps related to PSD and PSD Avoidance are listed in Section I.E.1 of this narrative.

Rules and Regulations Assessment:

Boiler No. 3 (Source Code BO01) is a circulating fluidized bed boiler rated at 422 MMBtu/hr. The unit was manufactured in 1986 and was installed in 1987. The boiler is permitted to burn coal, petroleum coke, peat, tire derived fuel, wood, and No. 2 fuel oil. The boiler is equipped with a limestone feed system and a baghouse for emissions control. The boiler is subject to the following rules and regulations:

- 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This boiler is a coal/solid fossil fuel fluidized bed unit. Applicable provisions of Subpart DDDDD include the following: a tune-up every five (5) years as specified in 40 CFR 63.7540; compliance with startup and shutdown work practice requirements in Table 3 of 40 CFR 63 Subpart DDDDD; limits on hydrogen chloride (HCl)*, mercury (Hg)*, CO, and PM emissions from gases discharged to the atmosphere as specified in Table 2 of 40 CFR 63 Subpart DDDDD; optional compliance with a total selected metals (TSM) limit; and compliance with applicable performance testing requirements and reporting requirements under 40 CFR 63 Subpart DDDDD.
- 40 CFR 60 Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators: According to 40 CFR 60.40b(b)(2), coal-fired boilers meeting the applicability requirements of 40 CFR 60 Subpart D must comply with sulfur dioxide limits under 40 CFR 60 Subpart D and PM / NO_X limits under 40 CFR 60 Subpart Db. The SO_2 limits under 40 CFR 60 Subpart D are 1.2 lb/MMBtu of heat input while burning solid fuel, 0.8 lb/MMBtu of heat input while burning liquid fuel or liquid fuel and wood, and a prorated limit for periods when solid and liquid fuels are burned simultaneously.
- 40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units: The applicability date for 40 CFR 60 Subpart Db is June 19, 1984. As discussed above, the boiler is subject to 40 CFR 60 Subpart Db for NO_X and PM standards. 40 CFR 60 Subpart Db limits NO_X emissions to a prorated value between 0.2 and 0.6 lb/MMBtu based on the amount and type of fuel burned. 40 CFR 60 Subpart Db limits PM emissions to 0.051 lb/MMBtu and limits the opacity of to 20 percent, except for one 6-minute period of not more than 27 percent.
- 40 CFR 64 – Compliance Assurance Monitoring: The boiler is subject to CAM for SO_2 and PM emissions.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent. The boiler is subject to a more restrictive, unit specific limit under Rule (d).
- 391-3-1-.02(2)(d) – Fuel-Burning Equipment: Rule (d) limits PM emissions and opacity from the boiler. The Rule (d) PM limit, 0.10 lb/MMBtu, is subsumed by the more stringent Subpart Db limit. The opacity limit in the rule is the same as the limit found in 40 CFR 60 Subpart Db.

- 391-3-1-.02(2)(g) – Sulfur Dioxide: Rule (g) limits fuel sulfur content and SO_2 emissions based on fuel type and heat input. The limits are the same as those found in 40 CFR 60 Subpart D.

Boiler No. 4 (Source Code BO02) is a bubbling fluidized bed boiler rated at 422 MMBtu/hr. The unit was manufactured in 1990 and was installed in 1991. The boiler is permitted to burn coal, petroleum coke, peat, natural gas, wood, and no. 2 fuel oil. The boiler is equipped with a limestone feed system and a baghouse for emissions control. The boiler is subject to the following rules and regulations:

- 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This boiler is a coal/solid fossil fuel fluidized bed unit. Applicable provisions of Subpart DDDDD include the following: an annual tune-up as specified in 40 CFR 63.7540; compliance with startup and shutdown work practice requirements in Table 3 of 40 CFR 63 Subpart DDDDD; limits on hydrogen chloride (HCl)*, mercury (Hg)*, CO, and PM emissions from gases discharged to the atmosphere as specified in Table 2 of 40 CFR 63 Subpart DDDDD; optional compliance with a total selected metals (TSM) limit; and compliance with applicable performance testing requirements and reporting requirements under 40 CFR 63 Subpart DDDDD.
- 40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units: The applicability date for 40 CFR 60 Subpart Db is June 19, 1984. The boiler is subject to Subpart Db for NO_X, PM, and SO_2 standards. 40 CFR 60 Subpart Db limits NO_X emissions to a prorated value between 0.2 and 0.6 lb/MMBtu based on the amount and type of fuel burned. 40 CFR 60 Subpart Db limits PM emissions to 0.051 lb/MMBtu and limits the opacity of to 20 percent, except for one 6-minute period of not more than 27 percent. 40 CFR 60 Subpart Db limits SO_2 emissions to 10 percent of the potential SO_2 emission rate and to a prorated value between 0.8 and 1.2 lb/MMBtu based on the amount and type of fuel burned.
- 40 CFR 64 – Compliance Assurance Monitoring: The boiler is subject to CAM for SO_2 and PM emissions.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent. The boiler is subject to a more restrictive, unit specific limit under Rule (d).
- 391-3-1-.02(2)(d) – Fuel-Burning Equipment: Rule (d) limits PM emissions from the boiler. The PM limit, 0.10 lb/MMBtu, is subsumed by the more stringent 40 CFR 60 Subpart Db limit. The opacity limit in the rule is the same as the limit found in 40 CFR 60 Subpart Db.
- 391-3-1-.02(2)(g) – Sulfur Dioxide: Rule (g) limits fuel sulfur content and SO_2 emissions based on fuel type and heat input. The limits are subsumed by the limits found in 40 CFR 60 Subpart Db.

Boiler No. 5 (Source Code BO03) is a bubbling fluidized bed boiler rated at 422 MMBtu/hr. The unit was manufactured and installed in 1995. The boiler is permitted to burn coal, petroleum coke, tire derived fuel, peat, natural gas, wood, and no. 2 fuel oil. The boiler is equipped with a limestone feed system and a baghouse for emissions control. The boiler is subject to the following rules and regulations:

- 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This boiler is a coal/solid fossil fuel fluidized bed unit. Applicable provisions of Subpart DDDDD include the following: a tune-up every five (5) years as specified in 40 CFR 63.7540; compliance with startup and shutdown work practice requirements in Table 3 of 40 CFR 63 Subpart DDDDD; limits on hydrogen chloride (HCl)*, mercury (Hg)*, CO, and PM emissions from gases discharged to the atmosphere as specified in Table 2 of 40 CFR 63 Subpart DDDDD; optional compliance with a total selected metals (TSM) limit; and compliance with applicable performance testing requirements and reporting requirements under 40 CFR 63 Subpart DDDDD.
- 40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units: The applicability date for 40 CFR 60 Subpart Db is June 19, 1984. The boiler is subject to 40 CFR 60 Subpart Db for NO_X, PM, and SO_2 standards. 40 CFR 60 Subpart Db limits NO_X emissions to a prorated value between 0.2 and 0.6 lb/MMBtu based on the amount and type of fuel burned. 40 CFR 60 Subpart Db limits PM emissions to 0.051 lb/MMBtu and limits the opacity of to 20 percent, except for one 6-minute period of not more than 27 percent. 40 CFR 60 Subpart Db limits SO_2 emissions to 10 percent of the potential SO_2 emission rate and to a prorated value between 0.8 and 1.2 lb/MMBtu based on the amount and type of fuel burned.
- 40 CFR 64 – Compliance Assurance Monitoring: The boiler is subject to CAM for SO_2 and PM emissions.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent. The boiler is subject to a more restrictive, unit specific limit under Rule (d).
- 391-3-1-.02(2)(d) – Fuel-Burning Equipment: Rule (d) limits PM emissions from the boiler. The PM limit, 0.10 lb/MMBtu, is subsumed by the more stringent 40 CFR 60 Subpart Db limit. The opacity limit in the rule is the same as the limit found in 40 CFR 60 Subpart Db.
- 391-3-1-.02(2)(g) – Sulfur Dioxide: Rule (g) limits fuel sulfur content and SO_2 emissions based on fuel type and heat input. The limits subsumed by the limits found in 40 CFR 60 Subpart Db.

*****The DC Circuit Court of Appeals issued a decision on July 29, 2016 vacating certain portions of the Boiler MACT rule and remanding other portions to EPA for further consideration. In December 2016, a court decision was made to remand without vacating the numeric MACT standards set in the Major Boilers Rule for new and existing sources in each of the eighteen subcategories. On remand, the EPA is to identify those standards for which the MACT floor would have differed if the EPA had included all best-performing sources in each subcategory in its MACT-floor analysis. In 2017, in response to the court remand, EPA shared an estimate of the new emission limits based on their reassessment of emissions data available for the various subcategories. Boilers 3, 4, and 5 (Source Codes BO01, BO02, and BO03) are coal/solid fossil fuel fluidized bed units. The HCl and Hg limits may change when the final decision is issued.

Combustion Turbine No. 1 (Source Code CT01) and Combustion Turbine No. 2 (Source Code CT02) were manufactured in 1986 and were installed in 1987. Combustion Turbine No. 1 is rated at 290 MMBtu/hr and 23 MW. Combustion Turbine No. 2 is rated at 316.63 MMBtu/hr and 27 MW. Both units are permitted to burn natural gas and no. 2 fuel oil. The turbines are not equipped with control devices. The units are subject to the following rules and regulations:

- 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines: The applicability date for the subpart is October 3, 1997 and it applies to all stationary gas turbines with a heat input at peak load equal to or greater than 10 MMBtu/hr. 40 CFR 60.332(d) limits NO_X emissions in terms of percent per volume based on the equation 0.0150 (14.4/Y) + F where Y is the heat rate and F is the fuel-bound nitrogen allowable. The subpart also limits the fuel sulfur content to 0.8 percent, by weight. The fuel sulfur content limit is subsumed by a more stringent PSD limit of 0.05 percent, by weight.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent. However, the combustion turbines vent directly to the Waste Heat Boilers, which are subject to a more stringent limit. Rule (b) has not been included in the permit for the Combustion Turbines for this reason.
- 391-3-1-.02(2)(g) – Sulfur Dioxide: Rule (g) limits fuel sulfur content and SO_2 emissions based on fuel type and heat input. The limits in Rule (g) are 3 percent sulfur, by weight, and 0.8 lb SO_2/MMBtu. Both of these limits are subsumed by the PSD limit that restricts fuel sulfur content to 0.5 percent, by weight.

Georgia Rule (d) – Fuel-Burning Equipment was not intended to apply to combustion turbines.

Waste Heat Boiler No. 1 (Source Code WHB1) and Waste Heat Boiler No. 2 (Source Code WHB2) were manufactured in 1986 and were installed in 1987. These boilers are tied to the combustion turbines (CTs) and cannot be operated independently to them, as they also share a stack with the CTs. Both boiler units are rated at 86 MMBtu/hr and are permitted to burn only natural gas while the CTs are permitted to burn natural gas and No. 2 fuel oil. The units are not equipped with control devices and are subject to the following rules and regulations:

- 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The Waste Heat Boilers are excluded from this subpart because they are considered part of the Combustion Turbines, which are Subpart GG units, and because they are not included in the definition of a boiler.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent. The Waste Heat Boilers are subject to a more restrictive, unit specific limit under Rule (d).
- 391-3-1-.02(2)(d) – Fuel-Burning Equipment: Rule (d) limits PM emissions (in terms of lb/MMBtu) to $0.5(10/R)^{0.5}$ where R is the heat input in MMBtu/hr. Rule (d) limits opacity to 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent.
- 391-3-1-.02(2)(g) – Sulfur Dioxide: Rule (g) limits fuel sulfur content based on heat input. The limit in Rule (g) is 2.5 percent sulfur, by weight. This limit is subsumed a PSD limit that restricts fuel sulfur content to 0.05 percent, by weight.

The Waste Heat Boilers are not subject to 40 CFR 60 Subpart Dc because they were constructed before the applicability date of June 9, 1989. The Waste Heat Boilers are not large enough to be subject to 40 CFR 60 Subpart D or Db.

The Pulp Processing Area (Source Code PULP) was installed in 1985. The area is not equipped with a control device. The equipment is subject to a PSD limit but is not subject to any specific rule or regulation.

Bleaching Systems Nos. 2 through 4 (Source Codes FP05, FP06, and FP08) were originally installed in 1986. The systems are not equipped with control devices. The equipment is subject to a PSD limit but is not subject to any specific rule or regulation.

The Sodium Bisulfate Tank (Source Code BT01) was installed in 2010. The tank is not equipped with a control device. The equipment is subject to a PSD requirement but it is not subject to any specific rule or regulation.

Paper Machine Nos. 16 through 20 (Source Codes PM01 through PM05) were installed in 1987, 1988, 1989, 1991, and 1998, respectively. Paper Machine No. 19 is equipped with two venturi scrubbers (Source Codes SB04 and SB11) that are used for the purpose of emission control. Paper Machine No. 20 is equipped with two venturi scrubbers (Source Codes SB05 and SB08) for safety and for minimizing employee exposure to dust. Paper Machines Nos. 16 through 20 have natural gas burners rated at 64, 70, 50, 50, and 60 MMBtu/hr, respectively. The units are subject to the following rules and regulations:

- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent.
- 391-3-1-.02(2)(e) – Particulate Emission from Manufacturing Processes: Rule (e) limits PM from a source based on the process input weight.
- 391-3-1-.02(2)(g) – Sulfur Dioxide: Rule (g) limits fuel sulfur content based on heat input. The limit in Rule (g) is 2.5 percent sulfur, by weight. This limit is subsumed by the PSD requirement that the paper machine dryers burn only natural gas.

The Converting Operation (Source Code CONV) was installed in 1985. The operation is equipped with four venturi scrubbers (Source Codes SB06, SB07, SB09, and SB10). The units are subject to the following rules and regulations:

- 40 CFR 63 Subpart JJJJ – National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating: The subpart lists several options for minimizing HAP emissions from coating operations. The facility has elected to limit organic HAP to no more than 4 percent of the mass of coating materials applied each month.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity f emissions from air contaminant sources to less than 40 percent.
- 391-3-1-.02(2)(e) – Particulate Emission from Manufacturing Processes: Rule (e) limits PM from a source based on the process input weight.

The Flexographic Printers (Source Codes FX05 and FX06) were installed over a period of time from 1986 to 1998. The printers are not equipped with control devices. The units are subject to the following regulation:

- 40 CFR 63 Subpart KK – National Emission Standards for the Printing and Publishing Industry: The subpart lists several options for minimizing HAP emissions from the printing operations. The facility has elected to limit organic HAP usage to 400 kilograms per month.

The printers are not subject to Georgia Rule (mm) – VOC Emissions from Graphic Arts Systems due to the exemption under 391-3-1-.02(2)(a)6(i)(I).

The Granulator (Source Code SHS) was installed in 1987. The unit is not equipped with a control device. The unit is subject to the following rules and regulations:

- 40 CFR 60 Subpart Y – Standards of Performance for Coal Preparation and Processing Plants: The subpart limits the opacity from coal processing and conveying equipment, coal storage system, and coal transfer and loading system to less than 20 percent. The subpart applies to sources that process more than 200 tons of coal per day and which were constructed after October 27, 1974. The facility began processing more than 200 tons per day of coal on June 14, 2011. The provisions of Subpart Y do not apply to processing petroleum coke.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity f emissions from air contaminant sources to less than 40 percent.
- 391-3-1-.02(2)(e) – Particulate Emission from Manufacturing Processes: Rule (e) limits PM from a source based on the process input weight.

The Fuel Silos (Source Codes FS01 through FS10) were installed over a period of time from 1987 to 1995. Each silo is equipped with a baghouse for control of PM emissions. The units are subject to the following rules and regulations:

- 40 CFR 60 Subpart Y – Standards of Performance for Coal Preparation and Processing Plants: The subpart limits the opacity from coal processing and conveying equipment, coal storage system, and coal transfer and loading system to less than 20 percent. The subpart applies to sources that process more than 200 tons of coal per day and which were constructed after October 27, 1974. The facility began processing more than 200 tons per day of coal on June 14, 2011. The provisions of Subpart Y do not apply to processing petroleum coke.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent. The Fuel Silos are subject to a more restrictive, unit specific limit under 40 CFR 60 Subpart Y.
- 391-3-1-.02(2)(e) – Particulate Emission from Manufacturing Processes: Rule (e) limits PM from a source based on the process input weight.

The Fuel Dryers (Source Codes FD01 through FD04) were installed in 1991. Each dryer is equipped with a baghouse for the control of PM emissions. The dryers are subject to the following rules and regulations:

- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent. The Fuel Dryers are subject to a more restrictive, unit specific limit under 40 CFR 60 Subpart Y in the event they process coal.

- 391-3-1-.02(2)(e) – Particulate Emission from Manufacturing Processes: Rule (e) limits PM from a source based on the process input weight. . The Fuel Dryers are subject to a more restrictive, unit specific limit under 40 CFR 60 Subpart Y in the event they process coal.

The Fuel Dryers are potentially subject to 40 CFR 60 Subpart Y – Standards of Performance for Coal Preparation and Processing Plants. Currently, the units only process petroleum coke. In the event the units dry coal, they will be subject to a PM limit of 0.070 g/dscm and an opacity limit of less than 20 percent. A condition has been included in the permit to reference these limits. The condition specifies that the limits apply only during the processing of coal.

The Limestone Silos (Source Codes LM01 through LM03) were installed in 1987. Each silo is equipped with a baghouse for the control of PM emissions. The silos are subject to the following rules and regulations:

- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the opacity of emissions from air contaminant sources to less than 40 percent.
- 391-3-1-.02(2)(e) – Particulate Emission from Manufacturing Processes: Rule (e) limits PM from a source based on the process input weight.

The facility operates a number of engines that are classified as stationary sources. The details for the engines are summarized in the table below.

Source Code	Engine Description	Classification	Size (hp)	Type	Manufacture or Install Date
CE01	Reciprocating Internal Combustion Engines (RICE)	Non-emergency	<750	Compression	2013
FP	Fire Pump Engine	Emergency	231	Compression	1987
EE02	CT Backup Engine	Emergency	11	Spark	2001
EE03	Mill Radio Backup Engine	Emergency	42	Spark	2003
WE01	Warehouse Fire Pump Engine	Emergency	175	Compression	1999
ME01	Murphy Engine	Non-emergency	144	Compression	2016
ME02	Murphy Engine	Non-emergency	144	Compression	2016

The compressor engines (Source Code: CE01) are subject to the following rules and regulations:

- 40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines: The subpart contains emission limits and maintenance activities the facility must complete depending on the size of the engine being used and the emergency or non-emergency status.
- 391-3-1-.02(2)(b) – Visible Emissions: Rule (b) limits the of opacity emissions from air contaminant sources to less than 40 percent.
- 391-3-1-.02(2)(g) – Sulfur Dioxide: Rule (g) limits fuel sulfur content based on heat input. The limit in Rule (g) is 2.5 percent sulfur, by weight. This limit is subsumed a

PSD avoidance limit that restricts fuel sulfur content to 0.05 percent, by weight. The mill is also subject to a facility wide fuel oil limit of 0.05

- 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. 40 CFR 60 Subpart IIII applies to engines that are reconstructed or modified after July 11, 2005 or are new engines constructed after April 1, 2006. The original compressor engines were replaced with diesel-fired, stationary reciprocating internal combustion engines (RICE) in 2013.

The murphy engines (Source Codes: ME01 and ME02) are used to operate equipment that process wastewater treatment plant residuals and were installed in 2016. They are subject to the following rules and regulations:

- 40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines: The subpart contains emission limits and maintenance activities the facility must complete depending on the size of the engine being used and the emergency or non-emergency status.
- 391-3-1-.02(2)(e) – Particulate Emission from Manufacturing Processes: Rule (e) limits PM from a source based on the process input weight.
- 391-3-1-.02(2)(n) – Fugitive Dust: Rule (n) limits the opacity from fugitive dust sources to less than 20%.

The engines are not subject to 40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. 40 CFR 60 Subpart JJJJ applies to engines that commence construction after July 1, 2007.

Emergency Engines
The emergency engines qualify as insignificant activities; therefore, they have not been included in Part 3.0 of the renewal. They have been discussed here for the purpose of summarizing the applicable requirements.

The facility installed two rental natural gas boilers (Source Codes RGB01 and RGB02) in 2017. They are each rated at less than 100 MMBtu/hr and are used as stand-by units during maintenance and/or unplanned power boiler or combustion turbine shutdowns. The rental boilers are subject to the following rules and regulations:

- 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. These boilers are considered "temporary boilers;" however, the facility may keep them in the same location for more than the 12-consecutive month period as allowed by Subpart DDDDD. Therefore, they are subject to Boiler MACT. Tune-ups will be conducted according to the procedures defined in §63.7540(a)(10)(i) through (vi).
- 391-3-1-.02(2)(d) – Fuel Burning Equipment: Rule (d) limits PM emissions (in terms of lb/MMBtu) to $0.5(10/R)^{0.5}$ where R is the heat input in MMBtu/hr. Rule (d) limits opacity to 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent.

- 391-3-1-.02(2)(g) – Sulfur Dioxide: Rule (g) limits fuel sulfur content and SO_2 emissions based on fuel type and heat input. This rule is subsumed by the requirement to burn only natural gas.

The rental boilers are subject to 40 CFR 60 Subpart Dc – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. Subpart Dc contains limits for PM and SO_2 emissions. Since the rental boilers only burn natural gas, these emission limits do not apply. However, the facility maintains monthly records of natural gas usage in accordance with 40 CFR 60.48c(g)(2).

C. Permit Conditions

The following table lists the changes made to conditions that appear in Section 3.0 of Permit No. 2621-103-0007-V-05-0. All conditions unchanged were held over from the previous permit and subsequent amendments.

Permit Condition	Original Condition		Notes
	Number	Permit	
3.2.1 – 3.2.13	3.2.1 – 3.2.13	V-04-0	No change. Condition 3.2.1 limits the supply of potential electrical output capacity. Conditions 3.2.2-3.2.12 are source-specific conditions that limit emissions of SO_2, NO_X, PM, and VOC. Condition 3.2.13 specifies the fuel requirement for the dryer burners of Paper Machine Nos. 16-20.
3.2.14 – 3.2.15	3.2.14 – 3.2.15	V-04-9	No change. Amendment V-04-9 revised the operational hours of the compressor engines (Condition 3.2.14) and added the option to exchange rental engines (Condition 3.2.15).
3.3.1 – 3.3.13	3.3.1 – 3.3.13	V-04-0	Condition 3.3.1 was revised to specifically include Boiler Nos. 3-5. Conditions 3.3.2-3.3.13
3.3.14 – 3.3.15	3.3.14 – 3.3.15	V-04-0	The references to Flexographic Printers Nos. 1 through 3 were removed. These units are no longer in operation.
3.3.16 – 3.3.18	3.3.16 – 3.3.18	V-04-0	No change. These conditions require compliance with applicable parts of 40 CFR 60 Subpart Y for coal processing and handling equipment at the facility.
3.3.19	3.3.19	V-04-1	No change. Amendment V-04-1 added a general compliance condition for applicable requirements of 40 CFR 60 Subpart IIII for the compressor engines.
3.3.20	3.3.20	V-04-7	No change. Amendment V-04-7 added a general compliance condition for applicable requirements of 40 CFR 63 Subpart ZZZZ (RICE MACT) for the compressor engines.
3.3.21 – 3.3.22	3.3.21 – 3.3.22	V-04-8	Provisions of 40 CFR 60 Subpart Dc and 40 CFR 63 Subpart DDDDD were added via amendment to permit the rental boilers.
3.3.23 – 3.3.26	---	V-05-0	These conditions were added to address applicable requirements of 40 CFR 63 Subpart DDDDD for Boiler Nos. 3-5.
3.4.1 – 3.4.5	3.4.1 – 3.4.5	V-04-0	No change. Conditions 3.4.1 and 3.4.2 contain opacity and PM emission limits, respectively, from any source at the facility. Conditions 3.4.3-3.4.5 list the fuels permitted for use in Boiler Nos. 3-5.
3.4.6	3.4.6	V-04-0	The TDF limit was revised from 3.5 tons per hour to 84 tons per day from Boilers 3 and 5 (BO01 and BO03). The 3.5 ton/hr limit was based on the maximum amount of TDF burned daily during a trial divided by 24 hours. A daily TDF limit would provide a more accurate method of determining compliance.
3.4.7 – 3.4.10	3.4.7 – 3.4.10	V-04-0	No change. These conditions require specific fuel limitations for the waste heat boilers and compressor engines (CE01), as well as visible emissions, opacity, and PM limits (Conditions 3.4.8 and 3.4.9) for the waste heat boilers.
3.4.11	3.4.11	V-04-7	No change. Amendment V-04-7 added an opacity limit to permit the Murphy engines.
3.4.12 – 3.4.13	3.4.12 – 3.4.13	V-04-8	No change. Amendment V-04-8 added PM emissions and opacity limits to permit the rental boilers.

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

The following table lists the changes made to conditions that appear in Section 4.0 of Permit No. 2621-103-0007-V-05-0. All conditions unchanged were held over from the previous permit and subsequent amendments.

Permit Condition	Original Condition		Notes
	Number	Permit	
---	4.2.1	V-04-0	This condition was removed. Initial PM stack testing was completed within 180 days of permit issuance (September 25, 2012) on January 29, February 5, and February 12 of 2013 for Sources BO02, BO03, and BO01, respectively.
4.2.1	4.2.2	V-04-0	The reference to Condition 4.2.1 was removed.
4.2.2 – 4.2.3	4.2.3 – 4.2.4	V-04-0	No change. Condition 4.2.2 allows the use of formulation data as an alternative to testing for the purpose of complying with 40 CFR 63 Subpart JJJJ.
4.2.4	4.2.5	V-04-8	No change. Amendment V-04-8 added a tune-up requirement per 40 CFR 63 Subpart DDDDD to permit the rental boilers.
4.2.5 – 4.2.7	---	V-05-0	These conditions were added to address applicable requirements of 40 CFR 63 Subpart DDDDD for Boiler Nos. 3-5.

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

The following table lists the changes made to conditions that appear in Section 5.0 of Permit No. 2621-103-0007-V-05-0. All conditions unchanged were held over from the previous permit and subsequent amendments.

Permit Condition	Original Condition		Notes
	Number	Permit	
5.2.1	5.2.1	V-04-0	No change. This condition lists the continuous monitoring requirements for various emissions from Boilers 3-5, the waste heat boilers, and the combustion turbine engines.
5.2.2	5.2.2	V-04-0	This condition was revised to include an additional section (c) to allow the option for using stack flow monitoring to demonstrate compliance with SO_2 limits in Conditions 3.2.3 and 3.2.4 for Boilers 3, 4, and 5 (BO01, BO02, and BO03).
5.2.3 – 5.2.12	5.2.3 – 5.2.12	V-04-0	No change. These conditions list the monitoring requirements of various parameters for the control equipment used at the facility.
5.2.13	5.2.13	V-04-0	This condition was revised to reflect the changes made to Condition 5.2.2.
5.2.14 – 5.2.17	5.2.14 – 5.2.17	V-04-0	No change. Condition 5.2.14 requires continuous monitoring for each compressor engine. Conditions 5.2.15-5.2.17 list the requirements for emission units subject to CAM.
---	5.2.18	V-04-4	This condition was consolidated and incorporated into Condition 5.2.3 under 5.2.3.e.
---	5.2.19	V-04-6	This condition was revised to clarify the data should be recorded once per winder operating shift. It was also incorporated into Condition 5.2.3 under 5.2.3.f.
5.2.18 – 5.2.19	---	V-05-0	These conditions were added to address applicable requirements of 40 CFR 63 Subpart DDDDD for Boiler Nos. 3-5.

C. Compliance Assurance Monitoring (CAM)

Not applicable.

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

The following table lists the changes made to conditions that appear in Section 6.0 of Permit No. 2621-103-0007-V-05-0. All conditions unchanged were held over from the previous permit and subsequent amendments.

Permit Condition	Original Condition		Notes
	Number	Permit	
6.1.1 – 6.1.6	6.1.1 – 6.1.6	V-04-0	No change. These are general recordkeeping conditions.
6.1.7.a.i-iv	6.1.7.a.i-iv	V-04-0	No change. These are excess emission limits that are to be reported in accordance with Condition 6.1.4.
6.1.7.a.v	6.1.7.a.v	V-04-0	The 3-hour average combustor temperature for CT02 was revised from 1470 to 1274 degrees Fahrenheit to reflect a smaller engine replacement/installation that took place via off-permit change in 2014.
6.1.7.b.i-viii	6.1.7.b.i-viii	V-04-0	No change. These are exceedances that are to be reported in accordance with Condition 6.1.4.
6.1.7.b.ix	6.1.7.b.ix	V-04-0	The TDF exceedance was revised from 3.5 tons per hour to 84 tons per day in conjunction with the change made in Condition 3.4.6.

Permit Condition	Original Condition		Notes
	Number	Permit	
6.1.7.b.x-xv	6.1.7.b.x-xv	V-04-0	No change. These are exceedances that are to be reported in accordance with Condition 6.1.4.
6.1.7.b.xvi	6.1.7.b.xvi	V-04-9	No change. Amendment V-04-9 revised the maximum heat input rating to accurately represent engines up to 750 hp.
6.1.7.b.xvii	6.1.7.b.xvii	V-04-1	No change. Amendment V-04-1 revised the compressor engine capacity exceedance.
6.1.7.b.xviii	6.1.7.b.xviii	V-04-9	No change. Amendment V-04-9 revised the operational limit for the compressor engines.
6.1.7.c-d	6.1.7.c-d	V-04-0	No change. These are excursions and additional information to be reported in accordance with Condition 6.1.4.
---	6.1.8	V-04-5	Section (a) of this condition was revised to reflect consistency with other pressure drop and scrubbant flow rate excursions; only the minimum range value was kept. This condition was also incorporated under Condition 6.1.7.c.vii.
---	6.1.9	V-04-6	Section (a) of this condition was revised to reflect consistency with other pressure drop and scrubbant flow rate excursions; only the minimum range value was kept. This condition was also incorporated under Condition 6.1.7.c.viii.
6.2.1 – 6.2.6	6.2.1 – 6.2.6	V-04-0	No change. These are equipment-specific reporting and recordkeeping requirements.
---	6.2.7	V-04-0	This condition was removed. Per previous conversations with EPD, there is no specific basis for requiring semi-annual natural gas sulfur analysis from the supplier for the combustion turbine/waste heat boilers (CT/WHBs).
6.2.7 – 6.2.8	6.2.8 – 6.2.9	V-04-0	No change. These are equipment-specific reporting and recordkeeping requirements.
---	6.2.10	V-04-0	This condition was removed. The modification for Paper Machine 20 (PM05) was completed in September 2012. Information pertaining to this modification has been documented and will be maintained for 15 years.
6.2.9	6.2.11	V-04-0	No change. This is an equipment-specific reporting and recordkeeping requirement.
---	6.2.12	V-04-0	This condition was removed. As stated the report submitted in accordance with Condition 6.2.13, dated February 24, 2017, demand growth emissions were not excluded from projected actual emissions. Therefore this condition does not apply.
6.2.10	6.2.13	V-04-0	The condition references were updated to reflect the change in condition numbers.
---	6.2.14	V-04-0	This condition was removed. The modification for Paper Machine 20 (PM05) was completed in September 2012.
6.2.11 – 6.2.14	6.2.15 – 6.2.18	V-04-0	The references to Bleaching System No. 1 were removed. This unit is no longer in operation.
6.2.15 – 6.2.17	6.2.19 – 6.2.21	V-04-0	No change. These are equipment-specific reporting and recordkeeping requirements.
6.2.18	6.2.22	V-04-0	The references to Flexographic Printers No. 1 through 3 were removed. These units are no longer in operation.
6.2.19	6.2.23	V-04-0	No change. This is an equipment-specific reporting and recordkeeping requirement.
6.2.20	6.2.24	V-04-9	No change. Amendment V-04-9 updated the monthly operational recordkeeping requirements for the compressor engines.
---	6.2.25	V-04-6	This condition was removed. The PM04 Winder Dust Collection Scrubber (SB11) was installed in December 2016. Notification of pressure drop and scrubbant flow rate ranges was submitted within 90 days of installation in March 2017.
6.2.21 – 6.2.26	6.2.26 – 6.2.31	V-04-8	No change. Amendment V-04-8 added provisions of 40 CFR 60 Subpart Dc and 40 CFR 63 Subpart DDDDD to permit the rental boilers.
6.2.27	---	V-05-0	This condition was added to address applicable requirements of 40 CFR 63 Subpart DDDDD for Boiler Nos. 3-5.

VII. Specific Requirements

A. Operational Flexibility: Not applicable.

B. Alternative Requirements: Not applicable.

C. Insignificant Activities

Refer to http://gatv.georgiaair.org/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: Not applicable.

E. Short-Term Activities: Not applicable.

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