

Facility Name: **Graphic Packaging International, LLC – Macon Mill**

City: Macon

County: Bibb

AIRS #: 04-13-021-00001

Application #: 617892

Date SIP Application Received: December 17, 2021

Date Title V Application Received: December 17, 2021

Permit No: 2631-021-0001-V-05-1

Program	Review Engineers	Review Managers
SSPP	Wendy Troemel	Heather Brown
SSCP	William Fleming	Daniel Slade
ISMU	Marcus Cureton	Dan McCain
TOXICS	Sherry Waldron	Stephen Damakse
Permitting Program Manager		Heather Brown - acting

Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Existing Permits

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
2631-021-0001-V-05-0	11/10/20	Title V Renewal

B. Regulatory Status

1. PSD/NSR/RACT

The facility is a major source under PSD because it emits more than 100 tpy of a regulated pollutant, and Pulp and Paper Mills are on the list of 28 industry categories that are subject to the 100 tpy major source threshold. The facility is located in an attainment area.

The following limits are the result of PSD and PCP reviews.

1. The Nos. 1 and 2 Lime Kilns are limited to:
 - a. Nitrogen oxides (NO_x) emissions of less than 3.5 lb/ton of calcium oxide (CaO) produced.
 - b. 0.064 gr/dscf of PM corrected to 10% oxygen when gaseous fossil fuel is burned or 0.13 gr/dscf corrected to 10% oxygen when liquid fossil fuel is burned.
2. The No. 3 Recovery Boiler is limited to:
 - a. 54.4 lb/hr of PM (or 0.027 gr/dscf of PM corrected to 8% oxygen).
 - b. 196 lb/hr of SO₂
 - c. 202.1 lb/hr of NO_x (or 120 ppm on a dry basis corrected to 8% oxygen).
 - d. 205.1 lb/hr of CO
 - e. 11.0 lb/hr of TRS compounds (or 5 ppm on a dry basis corrected to 8% oxygen).
3. The Smelt Tank is limited to:
 - a. 10.5 lb/hr PM (or 0.12 lb/ton of black liquor solids).
 - b. 1.5 lb/hr of TRS (or 0.0168 lb/ton of black liquor solids).
4. The No. 2 Biomass Boiler is limited to:
 - a. 0.10 lb/MMBtu heat input PM
 - b. 20% opacity through continuous monitoring of the pressure drop and scrubber flow rate through the scrubber.
5. The No. 3 Biomass Boiler is limited to:
 - a. 0.15 lb/MMBtu heat input CO on a 30-day rolling average.
 - b. 407.3 tpy of CO.

The following limits were taken to avoid PSD review.

1. The Nos. 1 and 2 Lime Kilns are limited to 41.6 lb/hour of SO₂.
2. The No. 3 Biomass Boiler is limited to:
 - a. 404.6 tpy of NO_x
 - b. 13.2 tpy of sulfuric acid mist
 - c. 0.030 lb/MMBtu heat input PM
 - d. 0.040 lb/MMBtu heat input PM_{2.5}
 - e. 0.049 lb/MMBtu heat input PM₁₀

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 ₁₀	Yes	✓		
PM _{2.5}	Yes	✓		
SO ₂	Yes	✓		
VOC	Yes	✓		
NO _x	Yes	✓		
CO	Yes	✓		
TRS	Yes	✓		
H ₂ S	Yes	✓		
Individual HAP	Yes	✓		
Total HAPs		✓		

II. Proposed Modification

A. Description of Modification

Graphic Packaging International, LLC – Macon Mill (GPI) has submitted this application to modify the frequency of sampling for wastewater treatment plant residuals, commonly called sludge. The current permit states the sampling should be conducted quarterly, and the facility wishes to reduce it to yearly. Additionally, the facility is requesting a change in the numbers of one category of equipment listed in the table in “Attachment B – Insignificant Activities List.”

This modification is being processed as a significant modification without construction to the existing Title V permit per the requirements of 391-3-1-.03(10)(e)5.(iii)(I) – “...At a minimum, every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant...”

The Nos. 2 and 3 Biomass Boilers (Source Codes BB2 and BB3) are subject to 40 CFR 61 Subpart E “National Emission Standard for Mercury,” as well as 40 CFR 63 Subpart DDDDD “NESHAP for Major Sources for Industrial, Commercial, and Institutional Boilers and Process Heaters.” 40 CFR 61 Subpart E limits mercury emissions from sludge firing in both boilers to 7.1 lb/24-hour period, while the requirements of 40 CFR 63 Subpart DDDDD are more stringent at 0.0711 lb/day (for BB2) and 0.012 lb/day (for BB3). Historical sampling of the sludge has indicated that the facility is at less than 0.05% of the allowable 7.1 lb mercury/day under 40 CFR 61 Subpart E.

The facility conducted its initial sludge sampling in 2013. At that point, the only sampling required was an initial test. The renewal permit issued in November 2020 included a new condition requiring quarterly sampling. The facility is requesting that the quarterly sampling be reduced to annual, and that the 8-hour collection time as outlined in Method 105, part 8.1, be reduced to 4 hours. 40 CFR 61 Subpart E does not require regular sludge sampling to demonstrate ongoing compliance with the regulation.

Additionally, the facility has requested to update Attachment B, Storage Tanks and Equipment, 3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid, to “numerous.”

B. Emissions Change - There are no changes in emissions due to this modification.

C. PSD/NSR Applicability - This is not a modification under PSD or NSR.

III. Facility Wide Requirements

There are no permit conditions being changed, modified, or added to Section 2.0.

IV. Regulated Equipment Requirements

There are no permit conditions being changed, modified, or added to Section 3.0.

V. Testing Requirements (with Associated Record Keeping and Reporting)

There are no permit conditions being changed, modified, or added to Section 4.0.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

There are no permit conditions being changed, modified, or added to Section 5.0.

VII. Other Record Keeping and Reporting Requirements

Permit Condition 6.2.23 was modified to reduce the sampling frequency from quarterly to annual, and to reduce the 8-hour collection time to 4 hours.

- 6.2.23 During any ~~quarter~~ 12-month period that wastewater sludge is burned, the Permittee shall analyze a composite sample of the wastewater sludge burned in the boilers. The sludge shall be sampled and analyzed for mercury according to the procedures specified in Method 105, except for 8.1, where the withdraw shall take place over a 4-hour period, and 40 CFR 61.54(c). Results shall be reported with the report required by Condition 6.1.4.
[40 CFR 61.52(b) and 391-3-1-.02(6)(b)1.]

VIII. Specific Requirements

Discuss any of the following specific requirements as they apply to the modification.

- A. Operational Flexibility – Not applicable
- B. Alternative Requirements – Not applicable
- C. Insignificant Activities – Not applicable

Attachment B, Storage Tanks and Equipment, 3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid, was changed from 3” to “numerous.”

- 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/CAIR/CSPAR – Not applicable
- I. Prevention of Accidental Releases – Not applicable
- J. Stratospheric Ozone Protection Requirements – Not applicable
- K. Pollution Prevention – Not applicable
- L. Specific Conditions – Not applicable

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//