

SIP CONSTRUCTION & OPERATING PERMIT AND TITLE V 502(b)10 CHANGE APPLICATION REVIEW

Facility Name: **Packaging Corporation of America, Inc.**

City: Clyattville, Georgia

County: Lowndes

AIRS #: 04-13-185-00001

Application #: 17274

Date SIP Application Received: February 22, 2007

Date Title V Application Received:

Permit No: 2631-185-0001-V-01-8

Program	Review Engineers	Review Managers
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Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and operate and Section 502(b)(10) change to the Part 70 source. 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), 391-3-1-.03(2), 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 permit and is presented in the same general order as the permit amendment. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

I. Facility Description

A. Existing Permits

Table 1 below lists the current Title V permit, all administrative amendments and minor and significant modifications to that permit, and any 502(b)(10) changes. Comments are listed in Table 2 below.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Comments	
		Yes	No
2631-185-0001-V-01-0	July 16, 2002	✓	
2631-185-0001-V-01-6	August 31, 2005	✓	
2631-185-0001-V-01-7	May 10, 2006	✓	

Table 2: Comments on Specific Permits

Permit Number	Comments
2631-185-0001-V-01-0	This is the original air quality Title V operating permit.
2631-185-0001-V-01-6	This amendment addressed the modification of the No. 3A Brown Stock Washer System and the installation of the vent collection equipment to route vent gases to the existing HVLC system for destruction to meet 40 CFR 63 Subpart S requirements. The amendment also addressed improvements made to the Paper Machine System (System Source Code: G014) for better utilization of the capacity of the pulp mill on all grades of product, to improve product quality and consistency, and to improve energy efficiency. This amendment also consolidated the conditions from permit amendments –1 through –5 and revoked them.
2631-185-0001-V-01-7	This amendment addressed the replacement of the chip screening and handling system and the installation of a pin chip silo with accompanying baghouse. This amendment qualified as a 502(b)(10) change to a Part 70 permit. This project has been delayed by PCA and has not been completed to date.

B. Regulatory Status

1. PSD/NSR/RACT

The facility is major for PSD. Title V Permit Amendment No. 2631-185-0001-V-01-6 was the only time the facility triggered applicability to 40 CFR 52.21. The facility has also taken some limits to avoid PSD applicability in the past. Please refer to the narrative for Title V Permit No. 2631-185-0001-V-01-0 for more details.

2. Title V Major Source Status by Pollutant

Table 3: 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	✓		
SO ₂	Yes	✓		
VOC	Yes	✓		
NO _x	Yes	✓		
CO	Yes	✓		
TRS	Yes	✓		
H ₂ S	Yes	✓		
Individual	Yes	✓		
Total HAPs	Yes	✓		

II. Proposed Modification

A. Description of Modification

Packaging Corporation of America, Inc. (PCA) is planning to replace the existing woodyard operations with a new woodyard that will be owned and operated by an outside party, but located at the same location as the current woodyard. The new woodyard will continue to be dedicated to supplying all the chips and the bark to the Mill. The Mill will supply the wood and will control the overall woodyard throughput. As part of this process, the existing woodyard equipment, up to and including the storage piles, will be shut down.

The woodyard operations consist of various process equipment that convert roundwood logs to bark and chips for further processing in the mill. In addition to receiving roundwood logs, the Mill has the ability to receive chips and bark via trucks and railroad cars. The chips are refined and screened in the woodyard operations for further processing at the Mill. The bark is also screened in the woodyard and routed to the boiler area where it is fired as a fuel in one of the Mill's combination boilers.

The proposed woodyard project has two key factors: (1) the ability to process more roundwood logs/chips/bark on a short term basis which will reduce the operating schedule of the woodyard operations with flexibility to process more roundwood logs, and (2) the woodyard equipment will be owned and operated by an outside party. The project will not alter or increase the current capacity of the Mill to use chips or bark, and thus will not impact the production capacity of the Mill. The Mill also has a paper production limit in its Title V operating permit that will not be affected.

PCA anticipates that construction of the new woodyard operations will begin in May 2007. Since part of the new operation will be built where current equipment is located, the new system will be built in two phases to allow continued operation of the current system until the new equipment is online. The first phase is scheduled to be fully operational in December 2007 and the second phase will be complete approximately 2 months later. The existing equipment that is being replaced will be shut down once the new system is fully online.

PCA certified in Application No. 17274 that the proposed woodyard project meets all applicable requirements, does not violate any existing permit term or condition, does not exceed allowable emissions under the permit, and does not constitute a Title I modification.

B. Emissions Change

PCA states in Application No. 17274 that there will be no point source emissions at the woodyard, only fugitive particulate matter (PM/PM₁₀) and volatile organic compounds (VOC) emissions similar in nature and quantity to the emissions from the current operation that will be shut down. PCA has identified the following potential sources of particulate matter as agreed in a January 18, 2007 meeting with the Georgia Environmental Protection Division (EPD), where it was established that the proposed project does not represent a Title I modification:

- Roundwood log, chip, and bark handling equipment
- Chip and bark storage piles

PCA has calculated fugitive emissions of PM and PM₁₀ for the proposed project associated with both chip/bark piles and drop points. Total potential woodyard operation emissions will decrease slightly from past actual emissions from the existing woodyard. This is due to a decrease in the number of transfer points and different shapes and dimensions for the storage piles. Total potential emissions from the logs/bark/chip processing are less than 10 tons per year (tpy) of PM. Although total project emissions are below the 10 tpy threshold for PM and could qualify for the Georgia SIP exemption pursuant to Georgia Air Quality Control Rule 391-3-1-.03(6)(i)(3), PCA submitted a Section 502(b)(10) change notification at the request of the EPD along with the corresponding SIP construction permit application.

PCA has identified VOC emissions from the woodyard and does not believe that there is reliable data to report fugitive VOC emissions associated with the woodyard operations. PCA acknowledges that there are naturally-occurring, biogenic fugitive VOC emissions associated with roundwood logs, chips, and bark; however, PCA has not attempted to quantify these fugitive emissions based on a lack of appropriate data available to attempt to quantify fugitive VOC emissions from woodyard operations.

PCA spoke with the National Council for Air and Stream Improvement, Inc. (NCASI) and NCASI confirmed that the limited data available on VOC emissions from wood are not appropriate to the wood processing or wood/chip/bark storage operations at the Mill. As such, PCA has not estimated VOC emissions for the proposed woodyard project and does not believe that it is practical to develop such estimates.

Table 4: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	Yes	Decrease.	Decrease. (The PTE for PM for the new woodyard is 4.59 tpy)
PM ₁₀	Yes	Decrease.	Decrease. (The PTE for PM ₁₀ for the new woodyard is 2.27 tpy)
SO ₂	No	—	—
VOC	Yes	None Expected.	None Expected. (PTE estimates for VOC emissions are not available.)
NO _x	No	—	—
CO	No	—	—
TRS	No	—	—
H ₂ S	No	—	—
Individual	No	—	—
Total HAPs	No	—	—

C. Title I Modification

- PSD/NSR Applicability

PCA certified that the woodyard project was not a Title I modification, which includes PSD/NSR major modifications, as part of Application No. 17274.

- NSPS Modification

PCA certified that the woodyard project was not a Title I modification, which includes NSPS modifications, as part of Application No. 17274.

- NESHAP Modification

PCA certified that the woodyard project was not a Title I modification, which includes NESHAP modifications, as part of Application No. 17274.

III. Facility Wide Requirements

A. Emission and Operating Caps

No new facility-wide emission and operating caps have been incorporated in Permit No. 2631-185-0001-V-01-8.

B. Applicable Rules and Regulations

No new facility-wide rules or regulations are applicable as a result of this change.

C. Compliance Status

The facility did not indicate that they were out of compliance with any facility wide requirements as part of Application No. 17274.

D. Operational Flexibility

The facility did not make any requests for operational flexibility as part of Application No. 17274.

E. Permit Conditions

No new permit conditions have been incorporated in Permit No. 2631-185-0001-V-01-8.

IV. Regulated Equipment Requirements

A. Brief Process Description

The woodyard operations consist of various process equipment that convert roundwood logs to bark and chips for further processing in the mill. In addition to receiving roundwood logs, the Mill has the ability to receive chips and bark via trucks and railroad cars. The chips are refined and screened in the woodyard operations for further processing at the Mill. The bark is also screened in the woodyard and routed to the boiler area where it is fired as a fuel in one of the Mill's combination boilers.

B. Equipment List for the New or Modified Process(es)

The new woodyard will be comprised of the following operations: the Chip Storage Pile (source code: G060), the Bark Storage Pile (source code: G061), the Chip Screening and Handling System (source code: G062), and the Bark Screening and Handling System (source code: G063).

These units will be included as part of the list of "Generic Emission Groups" in PCA's Title V renewal permit.

C. Equipment & Rule Applicability

- Emission and Operating Caps –

No new equipment-specific emission and operating caps have been incorporated in Permit No. 2631-185-0001-V-01-8.

- Applicable Rules and Regulations -

The new woodyard will be subject to Georgia Rule 391-3-1-.02(2)(b)—“Visible Emissions” and Georgia Rule 391-3-1-.02(2)(n)—“Fugitive Dust”; however, these rules have already been incorporated into the permit in Sections 8.18 and 8.22 respectively, so no new conditions have been added to the permit.

D. Compliance Status

The facility did not indicate that they were out of compliance with any equipment-specific requirements as part of Application No. 17274.

E. Operational Flexibility

The facility did not make any requests for operational flexibility as part of Application No. 17274.

F. Permit Conditions

No new permit conditions have been incorporated in Permit No. 2631-185-0001-V-01-8.

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

A. Individual Equipment:

No new permit conditions have been incorporated in Permit No. 2631-185-0001-V-01-8.

B. Equipment Groups (all subject to the same test requirements):

No new permit conditions have been incorporated in Permit No. 2631-185-0001-V-01-8.

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

A. Individual Equipment:

No new permit conditions have been incorporated in Permit No. 2631-185-0001-V-01-8.

B. Equipment Groups (all subject to the same monitoring requirements):

No new permit conditions have been incorporated in Permit No. 2631-185-0001-V-01-8.

VII. Other Record Keeping and Reporting Requirements

No new permit conditions have been incorporated in Permit No. 2631-185-0001-V-01-8.

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.
- 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. Prevention of Accidental Releases: Not Applicable.
- J. Stratospheric Ozone Protection Requirements: Not Applicable.
- K. Pollution Prevention: Not Applicable.
- L. Specific Conditions: Not Applicable.