

Georgia-Pacific

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DIVISION OF AIR RESOURCE MANAGEMENT Project NO, 1670005-675-

Palatka Pulp and Paper Operations Consumer Products Division

(no modale)

P.O. Box 919 Palatka, FL 32178-0919 (386) 325-2001

DIVISION OF AIR RESOURCE MANAGEMENT

August 30, 2012

Mr. Jeffery F. Koerner, Air Permitting North Section Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Re:

Georgia-Pacific Consumer Operations LLC

Palatka Mill

Replacement of Primary Condenser in Turpentine Recovery System

Request for Exemption from Construction Permitting – Rule 62-4.040 Exemptions

Dear Mr. Koerner:

Georgia-Pacific Consumer Operations LLC (GP) owns and operates a Kraft pulp and paper mill in Palatka, Putnam County, Florida (Palatka Mill), which operates under Title V Air Operating Permit No. 1070005-068-AV which was renewed by the Florida Department of Environmental Protection on July 9, 2012.

The Turpentine Recovery System is made up of a number of equipment components, including the Primary Separator, the Primary Condenser, the Secondary Condenser, the Turpentine Decanter, and two Turpentine Storage Tanks. The Palatka Mill is proposing to replace the Primary Condenser, as the current unit is leaking cooling water through the shell of the vessel due to stress cracks and corrosion. Neither the Primary Condenser nor the turpentine recovery system as a whole have suffered any unusual downtime as a result of the leaks, but it is hoped that replacing the Primary Condenser with a like-kind unit will help us avoid a possible failure of this unit in the future. The exhaust gases from the Primary Condenser vent are directed to the Mill's Thermal Oxidizer (Emission Unit No. 037) as part of the low volume, high concentration (LVHC) system gas stream for destruction of hazardous air pollutant (HAP) emissions as required by 40 CFR 63.443(a)(1)(i). The LVHC system gas stream can also be directed for a limited number of hours to the No. 4 Combination Boiler, which serves as a back-up HAP combustion device.

The Palatka Mill is classified as a major stationary source under the Prevention of Significant Deterioration (PSD) regulations in 40 CFR 51.166(b)(1)(i), which the FDEP has adopted and implements under Rule 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). As a major stationary source, physical changes or changes in the method of operation at the facility must be reviewed to determine if a major modification will occur as defined under Rule 62-212.400(2)(a). A physical change or change in the method of operation constitutes a major modification if it results in a significant emission increase (and, if netting is triggered, a significant net emissions increase) using one of the PSD applicability tests defined under the major modification rule referenced above.

Since the proposed project arguably involves a physical change to an existing source of emissions (Turpentine Recovery System) that is controlled by a regulated emissions unit (Thermal Oxidizer), we have used the "Baseline Actual-to-Projected Actual Applicability Test for Modifications at Existing Emissions Units" as prescribed under Rule 62-212.400(2)(a)1 to determine if a major modification will occur. The emissions analysis is shown in Attachment 1.

The replacement condenser will have the same design capacity of the existing unit, and as a result, there will be no changes to any of the actual or potential pollutant emission rates generated by the Turpentine Recovery System. The emissions analysis has been conducted assuming that all of the turpentine system emissions would be directed to the Thermal Oxidizer, as opposed to the backup LVHC combustion unit (No. 4 Combination Boiler), as the incinerator represents the "worst-case" emissions. The emission rates for the Turpentine Recovery System are based on (1) emission factors (lbs pollutant/air-dried ton of unbleached pulp-ADTUBP) multiplied by pulp mill production and on (2) emission factors multiplied by the quantity of natural gas fired in the Thermal Oxidizer to support combustion of the non-condensable gases (NCGs) and the stripper off-gases (SOGs). We have conservatively assumed a 99% destruct efficiency for volatile organic compounds (VOCs) and total reduced sulfur (TRS) compound emissions directed to the Thermal Oxidizer. The NCGs and SOGs make up the LVHC gas stream subject to collection and control requirements under 40 CFR 63.443(a)(1)(i).

Also, since there will not be any change in the actual pulp production rate at the Mill as a result of this project, there are no upstream or downstream "associated" emission units that will be affected by replacing the primary condenser unit in the Turpentine Recovery System, including the Thermal Oxidizer. Therefore, there are no associated emissions increases from upstream and downstream unmodified units as part of this project.

Based on the emissions analysis described in Attachment 1, since the baseline actual and projected actual VOC and TRS emission rates are the same, there will not be any emission increases for any of the PSD-regulated pollutants as a result of this replacement project, therefore, PSD is not applicable.

For all of the reasons stated above, we request the Department to exempt this project from the need to obtain a construction permit pursuant to Rule 62-4.040(1)(b) since the "activity will not emit air pollutants...in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified".

Should you have any questions concerning this submittal, please contact Ron Reynolds at (386) 329-0967.

Sincerely

Gary L. Frost

Vice President

Attachment

cc: Ron Reynolds, Georgia-Pacific Consumer Operations LLC (Palatka, Florida)

Wayne Galler, Georgia-Pacific LLC (Atlanta, Georgia)

Mark Ruppel, Georgia-Pacific Consumer Products LP (Atlanta, Georgia)



SEP 05 2012

ATTACHMENT 1 – EMISSION CALCULATIONS FOR REPLACEMENT OF AIR PRIMARY CONDENSER IN TURPENTINE RECOVERY SYSTEMOURCE MANAGEMENT

All emissions from Turpentine Recovery System are directed to Thermal Oxidizer (Emission Source 037). Emission factors for the Turpentine Recovery System come from NCASI which are based on the pulp processing rate at the Mill.

The highest 24 consecutive month baseline actual pulp production rate during 10-year look back period of July 2002 through June 2012 was 544,803 air-dried tons of unbleached pulp (ADTUBP).

The projected actual pulp production rate during the next five year period of 2012-2016 will not exceed the baseline actual pulp production rate of 544,805 ADTUBP. To determine the projected actual production rate, the Mill evaluated all relevant and available information, including historical operating data and the Company's highest projections of expected business activity for the five-year period after implementation of the project.

The PSD-regulated pollutants for the Turpentine Recovery System at the Mill include volatile organic compounds (VOCs) and total reduced sulfur (TRS) compounds.

Emission Rates for Turpentine Recovery System:

TRS from turpentine system condenser-Table 9I, NCASI Technical Bulletin No. 858 (February 2003) = 2.1 lb TRS/ADTUBP (median value, uncontrolled); assume minimum of 99% control with Thermal Oxidizer: Controlled emission factor = 0.021 lb TRS/ADTUBP

VOCs from condenser Table 9I, NCASI Technical Bulletin No. 858 (February 2003) = 0.023 lb VOC/ADTUBP (median value, uncontrolled); assume minimum of 99% control with Thermal Oxidizer: Controlled emission factor = 0.00023 lb VOC/ADTUBP

 $\frac{\textbf{Baseline actual TRS emissions}}{\text{lbs} = 5.7 \text{ ton TRS/yr}} = 544,805 \text{ ADTUBP x } 0.021 \text{ lb TRS/ADTUBP x } 1 \text{ ton } / 2,000 \text{ lbs} = 5.7 \text{ ton TRS/yr}$

 $\frac{\textbf{Baseline actual VOC emissions}}{2,000 \text{ lbs}} = 544,805 \text{ ADTUBP x } 0.00023 \text{ lb VOC/ADTUBP x } 1 \text{ ton / } 2,000 \text{ lbs} = 0.06 \text{ ton VOC/yr}$

The projected actual TRS and VOC emission rates from the Turpentine Recovery System are the same as the baseline actual emission rates since the emission factors and pulp processing rates are the same.

There are no other PSD-regulated pollutants generated by the Turpentine Recovery System.

Since the baseline actual and projected actual VOC and TRS emission rates are the same, there will not be any emission increases for any of the PSD-regulated pollutants as a result of this replacement project, therefore, PSD is not applicable.