Georgia-Pacific

Palatka Pulp and Paper Operations
Consumer Products Division

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December 15, 2011

Mr. Jeffery F. Koerner, Administrator Office of Permitting and Compliance
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Georgia-Pacific Consumer Operations LLC
Palatka, Florida Mill-Facility ID No. 1070005
Installation of a Sheet Stabilizer on No. 3 Tissue Paper Machine

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. 1070005-064-AV. The Palatka Mill is proposing to install a sheet stabilizing foil on the No. 3 Tissue Paper Machine (TPM).

The No. 3 TPM at the Palatka Mill currently experiences sheet instability which limits the maximum operating speed when producing light-weight paper grades. The root cause of this sheet instability is believed to be a combination of limited sheet support and high velocity air currents generated by the sheet run and aircap spillage. The identified solution is to mount a sheet stabilizing foil and air deflection baffle, which should increase sheet stability by physically supporting the sheet and deflecting high velocity air currents.

This project has the potential to allow for a production rate increase for certain light-weight grades which represent approximately 30% of current production for the No. 3 TPM. Production of heavier-weight grades are dryer-limited and will not be affected. Line speeds for light-weight grades on the No. 3 TPM may increase by as much as 55 feet/minute following installation of the stabilizing foil. This corresponds to an additional 2.5 air-dried tons of finished paper (ADTFP) per day of production for these grades.

To provide for a conservative analysis for air regulatory purposes, a production gain of 3.5 ADTFP/day, 365 days per year, was considered. On an annual basis, this equates to 1,278 ADTFP/year (3.5 ADTFP/day x 365 days/yr = 1,278 ADTFP). The projected line speed increases for light-weight grades could potentially free up to 3 additional days of machine time which could be utilized to produce other grades of paper. Additional production associated with additional TPM availability was estimated based on the design capacity of 234 ADTFP/day to be 702 ADTFP/yr (3 days x 234 ADTFP/day = 702 ADTFP/yr). The total annual production which could be associated with the proposed sheet stabilizing project is therefore 1,278 ADTFP + 702 ADTFP = 1,980 ADTFP/yr.

PSD Applicability Evaluation:

The Palatka Mill is classified as a major stationary source under the Prevention of Significant Deterioration (PSD) regulations of 40 CFR §52.21 and as adopted by the Florida Department of Environmental Protection under Chapters 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 are reviewed to determine if a major modification will occur as defined by 40 CFR §52.21(b)(2). A physical change or change in the method of operation constitutes a major modification if it results in both a significant emission increase[1] and a significant net emission increase[2].

The proposed project involves a modified emission unit, thus the existing unit emission test of 40 CFR §52.21(a)(2)(iv)(c) is applicable. This test utilizes the "baseline actual-to-projected-actual" calculation methodology for existing units. In addition to the emission unit being modified (No. 3 TPM), associated emission increases (AEI) must be considered from all other equipment which may experience an increase in utilization due to any increase in production from the No. 3 TPM.

The first step of the emissions analysis is to determine the baseline actual emissions (BAE) for the No. 3 TPM. According to the rule, the BAE is the average rate, in tons per year (tpy), at which the emission unit actually emitted during any consecutive 24-month period within the 10-year period immediately preceding the project.[3] Based on a review of historical operating data for the No. 3 TPM, the baseline period was selected to be January 2003 through December 2004. The annual average production rate during the baseline period for the No. 3 TPM was 60,480 ADTFP/yr.

The second step in completing the "baseline actual-to-projected actual" applicability test is to determine the projected actual emissions (PAE). PAE is defined as "the maximum annual rate (in tpy) at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source."[4] For the No. 3 TPM, there will be no increase in the design capacity, thus the projected actual production rates were evaluated for the five-year period following the planned completion of the project. The future projections take into account anticipated levels of business activity, considering past production for the No. 3 TPM as well as the projected production rate and expected sales for the products manufactured on the No. 3 TPM for the five-year period after this project is implemented. Based on these factors, the maximum projected actual production rate is 58,400 ADTFP/yr.

The third step of the "baseline actual-to-projected actual" applicability test is to evaluate the level of emissions that the No. 3 TPM "could have accommodated" during the 24-month period used to establish the baseline actual emissions. Any emissions which an existing

[1] 40 CFR §52.21(b)(40)
[2] 40 CFR §52.21(b)(3)
[3] 40 CFR §52.21(b)(48)(ii)
[4] 40 CFR §52.21(b)(41)(i)

emission unit could have accommodated during the baseline period and which are not related to the proposed project may be excluded from the calculation of projected actual emissions. Since emissions for all pollutants from the No. 3 TPM are calculated using production rates and emission factors provided in terms of pounds of pollutant emitted per ADTFP and the projected actual production rates are less than the baseline production rates, there is no need to evaluate the "could have accommodated" emissions for this project.

The fourth step of the "baseline actual-to-projected actual" applicability test is to determine the total project emissions increases, calculated as the projected actual emissions (PAE), minus any excludable emissions (EE), minus the baseline actual emissions (BAE). As no excludable emissions were calculated for this project, this simplifies the applicability test to be the PAE – BAE.

As noted above, it is also necessary to include any AEI from unmodified sources which may experience an increase in utilization due to a proposed project. AEI were conservatively calculated based on the increased utilization which could occur at other, unmodified, emission units at the maximum projected production for the No. 3 TPM which could be directly attributable to the proposed project (1,980 ADTFP/yr).

Based on information provided by Mill personnel, any additional production of light-weight grades will utilize about 67% purchased fiber and 33% internal fiber produced on-site. Additional production due to additional TPM availability could consist of any grade, including those which utilize 100% internally produced pulp. To calculate the AEI due to the increased utilization of the unmodified emission sources, two calculation approaches were used. That portion of additional tissue production from purchased fiber (1,278 x 0.667 = 852 ADTFP/yr) will not require any additional production from the pulp mill, thus associated emissions were calculated only for downstream affected sources, including the No. 3 TPM burners, facility boilers, facility roads, and converting operations. Emissions associated with additional production from internal pulp (702 + 1,278 x 0.3333 = 1,128 ADTFP) were calculated for both upstream (pulp mill) and downstream affected sources.

The fifth and final step of the "actual-to-projected actual" applicability test is to compare the total emission increase, calculated as PAE – BAE + AEI. For this project, the projected actual emissions are less than the baseline actual emissions, so the PAE-BAE is set to zero. The only emission increases therefore, result from the AEI due to the potential for increased utilization from the unmodified emission units.

The following table summarizes the baseline actual emissions, projected actual emissions, and AEI, as a result of the proposed sheet stabilizing foil project.

Pollutant	Baseline Actual Emissions (BAE)(tpy)	Projected Actual Emissions (PAE)(tpy)	Associated Emission Increase from Increased Utilization (AEI)(tpy)	Total Project Emission Increases [5] (tpy)	PSD Significant Emission Rate (tpy)
PM	25.4	24.5	2.4	2.4	25
PM_{10}	7.0	6.7	2.0	2.0	15
$PM_{2.5}$	7.0	6.7	1.8	1.8	10
VOC	13.3	12.9	1.7	1.7	40
SO_2	0	0	5.5	5.5	40
CO	0	0	10.9	10.9	100
NO_x	0	0	5.5	5.5	40
Pb	0	0	5.6E-04	5.6E-04	0.6
SAM	0	0	0.02	0.02	7
H_2S	0	0	0.03	0.03	10
TRS	0	0	0.1	0.1	10
GHG (CO2e)[6]	0	0	2,195	2,195	75,000

The above summary documents that the project will result in no significant increases in actual emissions of any PSD-regulated pollutant. As such, this project will not constitute a major modification as defined by 62-210.200(186) F.A.C. and 40 CFR §52.21. Emission calculations which support the above values are attached to this letter.

Since the project will not constitute a major modification, no actual emission increases will be generated from the modified No. 3 TPM, and any actual emission increases from the affected sources have conservatively been estimated to be well below the PSD significant emission levels, we request that this project be considered for an exemption from the requirement to obtain a construction permit in accordance with 62-4.040(b) F.A.C.

It should be noted that to be conservative we used the "incremental" production increase as the basis for estimating the AEI from the unmodified sources that could experience an increase in utilization due to the 3.5 ADTFP increase in production from the No. 3 TPM. The emission increases from the affected sources do not impact the permitted emission rates listed in the Mill's Title V Permit. Also, the incremental increase resulting from the No. 3 TPM project is not expected to result in production increases at affected sources above past baseline actual production level (i.e., highest annual production rate in 24-month period over 10-year "look back" period).

[5] Calculated as PAE – BAE + AEI, with PAE – BAE set to zero if the difference is a negative value
[6] This value does not include biogenic CO_2. EPA has deferred the inclusion of biogenic CO_2 emissions from PSD applicability via a federal register notice published on July 20, 2011 (76 FR 43490)

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

Sincerely,

Gary Frost
Vice President and Mill Manager
Georgia-Pacific Consumer Operations LLC – Palatka Pulp & Paper Mill

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