



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch
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Persons who commented on Draft NPDES Permit No. GA0003654

RE: EPD Response to Comments
Brunswick Cellulose LLC
NPDES Permit No. GA0003654

To Whom it May Concern:

Thank you for your comments regarding the permit issuance for the Brunswick Cellulose LLC permit. Attached is a summary of comments from the public and our responses to the issue raised. In addition, we have attached the Permit Addendum and Permit Fact Sheet Addendum documenting the changes made to the attached permit. We appreciate your interest in this matter.

After consideration of your comments, EPD has determined that the permit is protective of water quality standards and we have issued the permit.

If you have any questions, please contact Alan Leake of my staff at 404-463-4957.

Sincerely,

Audra Dickson, Manager
Wastewater Regulatory Program
Watershed Protection Branch

AHD/al

Attachment

EPD Response to Comments on Draft NPDES Permit
Brunswick Cellulose, LLC – Brunswick, GA0003654

COMMENTS RECEIVED	EPD RESPONSE
1. With regard to the color limits in the permit, we do not believe that the water quality standards are being met or will be met by the permit. 2. EPD must perform a reasonable potential analysis for color and then impose enforcement limits for this constituent in the permit.	EPA's 1982 Development Document for Development Document for Effluent Limitations Guidelines and Standards for the Pulp and Paper Point Source Categories, identified color as a pollutant of concern, however "EPA concluded that the discharge of color in pulp, paper, and paperboard effluents is not of uniform national concern," (Section VI, pg. 246) and decided not to develop national and uniform technology based effluent limits. EPA concluded color would be controlled and limited on a case-by-case basis as dictated by individual water quality standards for each State. An analysis of the available color data provided in the NPDES permit application and historical discharge monitoring data indicates there is a reasonable potential for color in the effluent discharge to cause or contribute to an in-stream water quality standard violation. To ensure protection of the water quality standard, daily maximum and daily average effluent limits were developed and included in the draft permit. See the permit and fact sheet for further discussion on the development of the numeric limits.
As drafted, the Permit establishes a Color limit for Outfalls 001 and 002, which is a new permit condition. As acknowledged in EPD's Permit Fact Sheet, we conducted color studies in September 2003, October 2004, February 2005, and May 2005, all of which showed that <i>there were no values measured outside of the natural background color values of the Turtle River</i>. In addition, since conducting those color studies showing no impact, we have further reduced the color discharged to the Turtle River by 39%. Finally, Georgia does not have technology-based limits for color in effluent. As a result, there are no specific numeric criteria for color; instead,	EPD has received complaints and public comments regarding the color discharged in the river from the mill. As acknowledged in the fact sheet, color studies were conducted in September 2003, October 2004, February 2005, and May 2005, all of which showed there were no values measured outside of the natural background color values in the Turtle River. The study was limited and did not demonstrate that color in the effluent would not cause or contribute to an instream water

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Georgia has a narrative prohibition against interfering with "legitimate water uses." See Ga. Comp. R. & Regs. 391-3-6-.03(5)(c). Given the repeated study results demonstrating that any color contained in our NPDES discharge was no greater than the River's natural background color coupled with an additional 39% reduction of whatever color may be present, there is no evidence to suggest that our discharge is interfering with, or even affecting, "legitimate uses" of the Turtle River. As a result, it is arbitrary and capricious for EPD to include a Color limit in the Permit. Brunswick Cellulose is requesting that the Color limit proposed in the Permit be removed.	quality violation. As a pollutant of concern, numeric technology based effluent limits for color were developed based on demonstrated performance, in accordance with 40 CFR Part 125; and included in the permit to limit the amount of color discharged to the river, thus protecting the narrative instream water quality standards for color. EPD continues to work with the mill regarding the effluent tidal release conditions in the permit to limit the effect of color on Turtle River.
EPD must perform a reasonable potential analysis for turbidity and then impose enforcement limits for this constituent in the permit.	Section VI of EPA's Development Document for Effluent Limitations Guidelines and Standards for the Pulp and Paper Point Source Categories (1982) identified pollutants of concern for the mills. Turbidity was not identified as a pollutant of concern for this type of mill. EPD has performed numerous site inspections and as observed by EPD staff determined there is insignificant discernible turbidity in the receiving water from the effluent being discharged to consider turbidity as a pollutant of concern. Additionally, there is no available information to conclude the effluent is causing or contributing to an instream water quality standard violation regarding turbidity.
The permit contains no conditions that address odor. Our consultants have advised us that the odor can be reduced by reducing the color because many of the constituents that cause the color also cause the odor.	Section VI of EPA's Development Document for Effluent Limitations Guidelines and Standards for the Pulp and Paper Point Source Categories (1982) identified pollutants of the concern for the mills. Odor was not identified as a pollutant of concern for this type of mill.

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	EPD has performed numerous site inspections and as observed by EPD staff determined there is insignificant discernible odor in the receiving water from the effluent being discharged to consider odor as a pollutant of concern. Additionally, there is no available information to conclude the effluent is causing or contributing to an instream water quality standard violation regarding odor.
The permit's levels of BOD and TSS are about 3 times higher than what can be attained with the technologies used at the mill. Reducing color discharges by improving the mill production operations would also result in a reduction of BOD and TSS discharges.	The mill is a primary industry for which EPA has developed Effluent Limit Guidelines (ELGs) establishing technology-based effluent limits (TBELs) for pollutants of concern. The mill is subject to 40 Code of Federal Regulations Part 430 Subpart B Pulp, Paper, and Paperboard Effluent Guidelines which establishes Best Practicable Technology (BPT) and Best Available Technology (BAT) Economically Achievable. The effluent limits for total suspended solids comply with the production-based BPT and BAT limitations established in the current regulations. The ELG's also established BPT and BAT effluent limits for BOD. However, the BOD limits included in the permit are based on the results of EPD's water quality modelling for the Turtle River. EPD compared the TBELs and the water quality based effluent limits (WQBELs) for BOD and determined the WQBELs were more stringent. EPD included the more stringent WQBELs in the permit. See the fact sheet for further discussion on the development of the effluent limits.

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As drafted, the Permit's daily maximum limit in pounds per day for CBODs was dramatically reduced from the existing permit limit of 200% of the monthly average to 150% of the monthly average. We understand EPD initiated this change based upon EPA guidance for Publicly Owned Treatment Works and <i>not</i> for Industrial facilities. In addition, NCASI's Technical Bulletin 355, "A Review of Variability in Effluent Quality Discharged by Selected Pulp and Paper Industry Sources," suggests that EPA uses a variability for bleach market pulp mills of 1.92 (192%) which further calls to question EPD's 150% decision. We have attached a report of the statistical analysis conducted by HDR for our NPDES discharge from 2006 to 2016 and the CBODs ratio of the monthly average to the daily maximum calculates to be 2.1.	EPD's internal industrial permitting strategy is to multiply the daily average by 1.5 to develop the daily maximum effluent limits. EPD has reviewed the NCASI Bulletin 355 and agrees the daily maximum for this type of mill can be calculated using a factor of 1.92. The daily maximum CBOD permit limits were recalculated and revised after the first draft permit and public comment period in 2017. Based on the recalculation and revision to the effluent limitation, the draft permit was public noticed again on March 27, 2018 through April 25, 2018.
Water quality is not being tested often enough and there is often a nasty plume in the river. The aeration pumps hardly constitute adequate treatment and the company should be encouraged to institute re-use of the water, rather than continuing to draw down the aquifer.	EPD believes the proposed sampling frequencies are appropriate and comply with the Federal and State requirements. The aeration pumps are just one component of the wastewater treatment system employed at the facility. Brunswick Cellulose currently re-uses approximately 1.4 million gallons per day of their wastewater in other parts of the mill.
The Permit establishes daily and monthly monitoring of Outfall 006, an internal Outfall associated with our Bleach Plant. We believe this monitoring schedule for chloroform and chlorophenolics is needlessly burdensome based on our historical monitoring data, and our compliance and	The frequency of monitoring in all wastewater permits is to demonstrate compliance with the effluent limitations. The current 2007 permit has a sampling frequency for internal Outfall 006, Bleach Plant, of daily for flow and monthly

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performance history. Over the past four years, for chloroform we have been on average at 16% of our daily maximum mass from the lowest chloroform limit in the previous permit and less than 6 % of the proposed chloroform limit in the proposed permit. As for chlorophenolics, the Bleach Plant outfall has never measured above the laboratories detectable limit. Put simply, based on these numbers, there is no reason for the Permit to contain the frequency of monitoring that it does. As drafted, the Permit's monitoring schedule for Outfall 006 matches the strict monitoring schedule outlined in 40 C.F.R. § 430.02 for a facility in its first five years of operations. In other words, despite the track record outlined above, our monitoring schedule is the same as that of a facility with no track record. Federal regulations suggest that after the initial five-year period, "the permit writer...shall determine the appropriate monitoring frequency [consistent with other laws], as applicable." 40 C.F.R. § 430.02. EPA's May 2000 Permit Guidance Document for Pulp, Paper, and Paperboard Manufacturing Point Source Category is in accord, stating that after the first five-years, the permit writer "may adjust monitoring requirements as [s/he] deem[s] appropriate on a case-by-case basis." Guidance Document at 8-17. Relevant here, the Guidance states that "for those mills consistently demonstrating pollutant reductions better than permit requirements, you may <i>establish less frequent monitoring requirements.</i>" <i>Id.</i> (emphasis added). The monitoring frequency we are requesting below is consistent with federal law and guidance and, given our history, is undeniably appropriate. Further, the monitoring frequency we are requesting is consistent with the permit requirements of another Georgia-Pacific Mill located in Region IV. Brunswick Cellulose LLC requests a semi-annual monitoring schedule for both chloroform and chlorophenolics.	monitoring for the other pollutants except for chloroform, which is weekly. Based on the results of the past sampling analysis for chloroform, EPD reduced the sampling frequency for chloroform from once per week to once per month. This is a 75% reduction in sampling per month. EPD appreciates the permittee's demonstrated compliance with the issued permit, however EPD believes monthly monitoring is appropriate for the internal Bleach Plant discharge to continue to demonstrate compliance. Additionally, the sampling frequency is consistent with similar types of mills in the State of GA. EPD does not establish sampling frequencies based on other mills in Region IV, outside of the State.

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As drafted, the Permit states that "EPD may require, by written notification, more frequent monitoring or the monitoring of other pollutants not required by this permit." While EPD has the authority to impose additional requirements under certain limited circumstances, any substantive changes to the Permit, such as more frequent monitoring or monitoring for additional pollutants, are subject to public notice, comment, and administrative procedures. Because this language does not recognize these required steps, this provision is not in accordance with law. Brunswick Cellulose requests that this language be deleted.	The permit condition is a standard condition included in all wastewater permits issued by EPD. A written request for more frequent monitoring or the monitoring of other pollutants is not subject to a public notice period or public comment.
The Permit adds a new provision requiring us to provide an annual certification that the processes and wastewater characteristics as described in our permit application remain current. This provision is problematic in several respects. First, it is duplicative of the other notification provisions in the Permit; indeed, it includes express references to those other provisions. Second, the facility will not have performed the broad analysis that federal and State regulations require for the five-year permit application cycle (e.g., there is no annual Form 2-C) on an annual basis. And, third, such a certification directly conflicts with the five-year period established by Congress for periodically revisiting NPDES permits and conditions. See 33. U.S.C. § 402(b)(1)(B). Given the other notification obligations contained in the Permit, we believe this new and additional annual certification is unnecessary. Additionally, we fear that such a certification could be misused to undermine the legal effect of the Permit (e.g., in a citizen suit context). As a result, Brunswick Cellulose requests that this provision be removed.	The permit condition is a standard condition included all industrial wastewater permits issued by EPD. The permittee has a regulatory obligation to notify EPD if any changes occur at the mill that will impact the industrial process or may alter the characterization of the effluent. EPD has an obligation to evaluate those changes and determine if there is cause for modifying the permit to protect the instream water quality standards. EPD does not agree that the inclusion of a one-time annual certification is "unnecessary."

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Part III. C.2. (page 26) The Permit states that, with respect to effluent discharges, Brunswick Cellulose must “Begin release on the incoming tide at mid-tide and continue to release to mid-tide on the outgoing and discontinue release at mid-tide on the outgoing tide and maintain zero release until mid-tide of the incoming tide.” As written, this implies that we must release for the entire six hours between mid-tide of the incoming tide and mid-tide of the outgoing tide. Brunswick Cellulose requests that EPD modify this language to include the words “or after” and “may” to more accurately describe our release schedule.	Page 26, Part III.C.2 – Title Release Schedule The language was modified to clarify the meaning of the condition. The words “or after” and “may” were added to the condition to read as: “Begin release on <u>or</u> after the incoming tide at mid-tide, and <u>may</u> continue to release to mid-tide on the outgoing, and discontinue release at mid-tide on the outgoing tide, and maintain zero release until mid-tide of the incoming tide.”
The permit establishes Fecal Coliform limits for Outfalls 001 and 002 after an initial compliance period. A we previously commented, there are numerous, well known interferences with fecal coliform tests in pulp mill effluent. Conventional bacteria test methods are subject to interferences and false positives when applied to pulp and paper mill effluents. For example, certain plant-related bacteria, including Klebsiella, Serratia and Raoutella, are all common in pulp and paper mill effluents and all will test positive using the Fecal Coliform test. As a result, we believe there may be bacteria monitoring parameters that are more accurate and more effective for our effluent than Fecal Coliform.	Comment noted. The designated use of the receiving waterbody has a water quality standard for fecal coliform. The submitted application indicated (1) a sanitary wastestream as a contributor to the effluent and (2) analytical data for fecal coliform in the effluent exceeding the instream water quality standard. As a result of the information provided on the application, EPD believes fecal coliform is a pollutant of concern. To ensure the discharge does not cause or contribute to a violation of the instream water quality standard for fecal coliform, a WQBEL was developed and included in the permit.

Acronyms

EPD – Environmental Protection Division
TBEL - Technology Based Effluent Limit
BAT – Best Available Technology Economically Achievable
NPDES – National Pollutant Discharge Elimination System
ELG – Effluent Limit Guideline for Pulp, Paper, and
Paperboard, 40 CFR Part 430

TMDL – Total Maximum Daily Loading
WQBEL - Water Quality Based Effluent Limit
BPT – Best Practicable Control Technology Currently Available
BOD₅ – 5-day Biological Oxygen Demand