

Application Type Renewal
 Facility Type Industrial
 Major / Minor Major

**NPDES PERMIT FACT SHEET
 INDIVIDUAL INDUSTRIAL WASTE (IW)
 AND IW STORMWATER**

Application No. PA0012963
 APS ID 885249
 Authorization ID 1210000

Applicant and Facility Information

Applicant Name	<u>WestRock Converting Company</u>	Facility Name	<u>WestRock Converting Company Stroudsburg Mill</u>
Applicant Address	<u>P.O. Box 770, 1 Paper Mill Road Delaware Water Gap, PA 18327</u>	Facility Address	<u>1 Paper Mill Road Delaware Water Gap, PA 18327</u>
Applicant Contact	<u>Mark Cline, General Manager</u>	Facility Contact	<u>William Deats</u>
Applicant Phone	<u>570.476.0120</u>	Facility Phone	<u>570.476.0120</u>
Client ID	<u>83682</u>	Site ID	<u>4034</u>
SIC Code	<u>2631</u>	Municipality	<u>Smithfield Township</u>
SIC Description	<u>Manufacturing - Paperboard Mills</u>	County	<u>Monroe</u>
Date Application Received	<u>November 29, 2017</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u>December 19, 2017</u>	If No, Reason	<u>Major Facility</u>
Purpose of Application	<u>Renewal of NPDES permit for discharge of industrial wastewater and stormwater.</u>		

Summary of Review

The applicant is requesting renewal of NPDES Permit No. PA0012963 to discharge treated industrial wastewater and stormwater into Brodhead Creek. Per the Department's existing use list, the receiving stream has an existing use classification of Cold Water Fishes, Migratory Fishes (CWF, MF) which is more protective than the designated use classification of Trout Stocked Fishes, Migratory Fishes (TSF, MF). Therefore, the existing use classification of CWF, MF was used to develop effluent limitations.

The facility falls under SIC 2631 - Paperboard Mills and the discharge is subject to Effluent Limitations Guidelines found under 40 CFR Part 430 "The Pulp, Paper and Paperboard" Industrial Category, Subpart J - Secondary Fiber Non-Deink Subcategory. This facility is specifically involved in coated paperboard manufacturing.

A compliance check performed on June 5, 2019, revealed two (2) unresolved violations. Language will be added to the Draft permit cover letter to explain a permit cannot be issued until the violations are resolved.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
X		Philip J. Amico, P.E., P.L.S. / Project Manager	June 6, 2019
X		Amy M. Bellanca, P.E. / Environmental Engineer Manager	June 6, 2019

Discharge, Receiving Waters and Water Supply Information

Outfall No. 001 Design Flow (MGD) 0.627

Latitude 40° 59' 59" Longitude 75° 08' 52"

Quad Name Stroudsburg Quad Code 1144

Wastewater Description: Non-contact cooling water and treated process wastewater

Receiving Waters Brodhead Creek Stream Code 4750

NHD Com ID 26175224 RMI _____

Drainage Area 259 mi² Yield (cfs/mi²) 0.197

Q₇₋₁₀ Flow (cfs) 51.1 cfs Q₇₋₁₀ Basis DFLOW; prior analysis

Elevation (ft) _____ Slope (ft/ft) _____

Watershed No. 01E Chapter 93 Class. TSF, MF

Existing Use CWF, MF Existing Use Qualifier _____

Exceptions to Use _____ Exceptions to Criteria _____

Assessment Status Attaining Use(s)

Cause(s) of Impairment _____

Source(s) of Impairment _____

TMDL Status _____ Name _____

Secondary Waters Delaware River Stream Code _____

NHD Com ID _____ RMI _____

Drainage Area _____ Yield (cfs/mi²) _____

Q₇₋₁₀ Flow (cfs) _____ Q₇₋₁₀ Basis _____

Elevation (ft) _____ Slope (ft/ft) _____

Watershed No. _____ Chapter 93 Class. WWF, MF

Existing Use _____ Special Protection _____

Exceptions to Use _____ Exceptions to Criteria _____

Nearest Downstream Public Water Supply Intake Easton Area Water System

PWS Waters Delaware River Flow at Intake (cfs) _____

PWS RMI _____ Distance from Outfall (mi) 30

Changes Since Last Permit Issuance: The parameters of concern have been expanded to include those recommended in DRBC Docket No. D-2006-041-3 issued on December 12, 2018 (attached).

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>003, 004, 006, 007</u>	Design Flow (MGD)	<u>N/A</u>
Latitude	<u></u>	Longitude	<u></u>
Quad Name	<u></u>	Quad Code	<u></u>
Wastewater Description:	<u>Stormwater only</u>		
Receiving Waters	<u>Brodhead Creek</u>		

Changes Since Last Permit Issuance: The parameters of concern in the permit for the stormwater outfalls have been updated in accordance with Appendix E of the current version of PAG-03.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>101 (Internal Monitoring Point)</u>	Design Flow (MGD)	<u>0.1415</u>
Latitude	<u>N/A; Internal Monitoring Point (IMP)</u>	Longitude	<u>N/A; IMP</u>
Quad Name	<u>Stroudsburg</u>	Quad Code	<u>1144</u>
Wastewater Description: <u>Treated process wastewater</u>			

Receiving Waters	<u>Brodhead Creek</u>	Stream Code	<u>4750</u>
NHD Com ID	<u>26175224</u>	RMI	<u></u>
Drainage Area	<u>259 mi²</u>	Yield (cfs/mi ²)	<u>0.197</u>
Q ₇₋₁₀ Flow (cfs)	<u>51.1 cfs</u>	Q ₇₋₁₀ Basis	<u>DFLOW; prior analysis</u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>01E</u>	Chapter 93 Class.	<u>TSF, MF</u>
Existing Use	<u>CWF, MF</u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u></u>		
Source(s) of Impairment	<u></u>		
TMDL Status	<u></u>	Name	<u></u>

Secondary Waters	<u>Delaware River</u>	Stream Code	<u></u>
NHD Com ID	<u></u>	RMI	<u></u>
Drainage Area	<u></u>	Yield (cfs/mi ²)	<u></u>
Q ₇₋₁₀ Flow (cfs)	<u></u>	Q ₇₋₁₀ Basis	<u></u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u></u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	<u></u>	Special Protection	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>

Nearest Downstream Public Water Supply Intake	<u>Easton Area Water System</u>		
PWS Waters	<u>Delaware River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>30</u>

Changes Since Last Permit Issuance: The parameters of concern have been expanded to include those recommended in DRBC Docket No. D-2006-041-3 issued on December 12, 2018.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.627
Latitude 40° 59' 59" **Longitude** 75° 08' 52"
Wastewater Description: Non-contact cooling water and treated process wastewater

Technology-Based Limitations

Minimum technology-based effluent limitations shall be as follows, unless water quality-based or best professional judgment limitations are necessary:

Parameter	Minimum	Average Monthly	IMAX
Flow (MGD)	XXX	Report	XXX
TRC (mg/L)	XXX	0.5	1.6
pH (S.U.)	6.0	XXX	9.0
Fecal Coliform (5/1 – 9/30) (No./100ml)	XXX	200	1,000
Fecal Coliform (10/1 – 4/30) (No./100ml)	XXX	2,000	10,000
Temperature (F°)	XXX	Report	Report Daily Max
Total Dissolved Solids (mg/L)	XXX	Report	Report Daily Max

Comments: DRBC Docket No. D-2006-041-3 issued on December 12, 2018, requested that Temperature and Total Dissolved Solids be added to permit for Outfall 001.

Water Quality-Based Limitations

None.

Development of Effluent Limitations

Outfall No. 003, 004, 006, 007 **Design Flow (MGD)** N/A
Latitude _____ **Longitude** _____
Wastewater Description: Stormwater

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Minimum	Average Monthly	IMAX
pH (S.U.)	6.0	XXX	9.0
COD (mg/L)	XXX	XXX	Report Daily Max
Total Suspended Solids (mg/L)	XXX	XXX	Report Daily Max

Comments: The parameters of concern have been revised for consistency with Appendix E - Paper and Allied Products of the current version of PAG-03.

Water Quality-Based Limitations

None.

Development of Effluent Limitations

Outfall No. 101 Design Flow (MGD) 0.1415
 Latitude N/A; Internal Monitoring Point (IMP) Longitude N/A; IMP
 Wastewater Description: Treated process wastewater

Technology-Based Limitations

Minimum technology-based effluent limitations shall be as follows, unless water quality-based or best professional judgment limitations are necessary:

Parameter	Minimum	Average Monthly	IMAX
Flow (MGD)	XXX	Report	XXX
pH (S.U.)	6.0	XXX	9.0
Dissolved Oxygen (mg/L)	5.0	XXX	XXX
BOD ₅ (Raw Sewage Influent)	XXX	Report	Report Daily Max
CBOD ₅ (mg/L)	XXX	Report (mg/L) and 220 lbs/day	Report (mg/L) and 440 lbs/day Daily Max
CBOD ₅ (mg/L) % removal	XXX	85%	XXX
Total Suspended Solids (mg/L) (Raw Sewage Influent)	XXX	Report	Report Daily Max
Total Suspended Solids (mg/L)	XXX	Report (mg/L) and 220 lbs/day	Report (mg/L) and 440 lbs/day Daily Max
Total Suspended Solids (mg/L) % removal	XXX	Report	XXX
Nitrate-Nitrite as N (mg/L)	XXX	Report	XXX
Total Kjeldahl Nitrogen (mg/L)	XXX	Report	XXX
Total Phosphorus (mg/L)	XXX	Report	XXX

Water Quality-Based Limitations

Parameter	Minimum	Average Monthly	IMAX
Total Dissolved Solids (mg/L)	XXX	5,000	10,000
Total Nitrogen	XXX	Report (mg/L) and 5.0 lbs/day	Report Daily Max
Ammonia-Nitrogen (mg/L)	XXX	20	XXX

Comments: DRBC Docket No. D-2006-041-3 issued on December 12, 2018, includes CBOD₅ % removal, Total Nitrogen, Ammonia-Nitrogen, Total Kjeldahl Nitrogen, Nitrate-Nitrite as N, Total Suspended Solids (Raw Sewage Influent) and Total Suspended Solids % removal for Outfall 101.

The CBOD₅ and TSS mass limitations were derived during previous reviews and remain valid as Best Professional Judgement (BPJ) facility-specific limitations based on performance of the treatment plant.

Additional Considerations

Best Practicable Technology Currently Available (BPT) limitations for CBOD₅ and TSS for Outfall 101 were calculated using the production-based ELG for the facility. The resulting mass limitations below are less stringent than the mass limitations in the previous permit; therefore, the mass limitations from the previous permit will be retained and continue in this permit.

The facility is subject to Effluent Limitations Guidelines (ELG) found in 40 CFR Part 430 - "Pulp, Paper and Paperboard" Industrial Category, Subpart J - Secondary Fiber Non-Deink Subcategory. CBOD₅ will continue to be used interchangeably with BOD₅ which is used in the ELG. The production rates provided in the current application are actually less than those that were used to calculate ELG limitations in prior renewals. Therefore, the average annual production of 155,660,000 off-pounds (or 426,500 lbs/day) cited in the previous application will continue to be used for the ELG calculations.

ELG limitations for CBOD₅ :

Average of daily values for 30 consecutive days = 1.5 lbs per 1,000 lbs of product
= 1.5 x 426.5
= 640 lbs/day

Maximum for any 1 day = 3.0 lbs per 1,000 lbs of product
= 3.0 x 426.5
= 1,280 lbs/day

ELG limitations for TSS:

Average of daily values for 30 consecutive days = 2.5 lbs per 1,000 lbs of product
= 2.5 x 426.5
= 1,066 lbs/day

Maximum for any 1 day = 5.0 lbs per 1,000 lbs of product
= 5.0 x 426.5
= 2,132 lbs/day

The CBOD₅ and TSS mass limitations in the current permit remain valid as Best Professional Judgement (BPJ) facility-specific limitations based on performance of the treatment plant. The CBOD₅ and TSS mass limitations are 220 lbs/day (Ave Mon) and 440 lbs/day (Daily Max), which are more stringent than the above calculated ELG limitations.

Reasonable Potential Analysis

A reasonable potential analysis was performed using the Department's Toxics Screening Analysis spreadsheet and the PENTOXSD model for toxics parameters with reported sample concentrations above minimum detection levels for IMP 101. The results indicate that no water quality-based effluent limitations are required (see attached results).

Q₇₋₁₀ = 51.1 cfs

RMI at discharge: 1.60; elevation 320 ft.; D.A. 259 mi²

RMI downstream: 1.18; elevation 310 ft.; D.A. 275 mi²

Stream slope = $\frac{320 \text{ ft.} - 310 \text{ ft.}}{(1.60 - 1.18 \text{ mi})(5280 \text{ ft/mi})}$ = 0.0045 ft/ft

The drainage area at the USGS gage in close proximity to the facility is 259 mi² and the low flow yield (LFY) is 51.1 cfs/259 mi² = 0.197 cfs/mi².

Chemical Additives

The applicant is seeking approval to use two new chemical additives, Solenis Advantage 1529 (reduction of foam) and Solenis PC920 (concentration of solids), in the treatment system. Both chemicals are currently found on the Department's approved list and Chemical Additives Notification forms were submitted with the renewal application. The usage rates appear reasonable and anticipated in-stream concentrations are less than WQBELs determined by PENTOXSD. A special condition will be included in Part C of the permit to provide the most current language for Chemical Additives use.

Supporting documents:



