

PRETREATMENT RATIONALE FOR PERMIT ISSUANCE

**Packaging Corporation of America
DeSoto County
Olive Branch, Mississippi
Permit No.: MSP092472**

**SIC Code: 2653 – Corrugated and Solid
Fiber Boxes
April 8, 2026
Permit Writer: Bill Stacy**

I. FACILITY INFORMATION

- A. Nature of Business: Manufacturer of paperboard corrugated packaging.
- B. Process Wastewater Description: Continuous discharges generated from washing of water-based flexographic print cylinders on converting machines.
- C. Proposed Flowrate: Outfall 001: 0.00026 MGD Monthly Average
- D. Applicable Federal Guidelines: 40 CFR Part 403 – General Pretreatment Regulations.
- E. Process Wastewater Treatment: No treatment of wastewater occurs prior to introduction into the collection system.

II. RECEIVING POTW INFORMATION

- A. POTW Name; AI No.; and Permit No.: DeSoto County Regional Utility Authority, Metro DeSoto WWTP; 3129; MS0028479
- B. POTW Treatment Type: Activated sludge followed by UV disinfection
- C. POTW Design Flowrate: Phase I: 0.537 MGD
Phase II: 1.0 MGD
- D. POTW Receiving Stream: Unnamed tributary thence into Nonconnah Creek
- E. POTW Receiving Stream 7Q10 (Q_{7/10}): 0 MGD

III. NOTABLE SAMPLING DATA FROM PERMIT APPLICATION 2P

Parameter	Daily Max (mg/L)
BOD	786
COD	4650
TSS	300
Ammonia (as N)	10.6
pH	-
Oil & Grease	30.3
Cadmium	Non-detect
Chromium	Non-detect
Copper	3.25
Lead	Non-detect
Mercury	Non-detect
Nickel	Non-detect
Zinc	0.600

IV. EFFLUENT LIMITATION GUIDELINES APPLICABILITY

40 CFR Part 403 – General Pretreatment Regulations.

The facility is listed as a manufacturer of corrugated and solid fiberboard boxes, however 40 CFR Part 430 – The Pulp, Paper, and Paperboard Point Source Category only applies to facilities manufacturing paperboard from raw materials such as fiber or wood pulp. Industrial activity conducted at PCA includes the assembly and printing of paperboard boxes from already manufactured paperboard, therefore, 40 CFR Part 430 is not applicable to the discharge.

No Federal Categorical Effluent Limitations are applicable to the discharge, however, due to non-compliance history at the receiving POTW, the discharge will be evaluated for those parameters for which the POTW’s NPDES permit directly limits. Loading calculations to the POTW for the applicable parameters are shown below.

$$(X_C) * 8.34 * Q_{AVG} = Loading (lbs/day)$$

Where:

X_C = Concentration reported in application data (mg/L)

Q_{ABG} = Proposed permitted flowrate (MGD)

*Note: for those parameters that were not detected in the effluent sample provided with the application, a value equal to one-half the MQL is used for calculation purposes.

BOD ₅	786	*	8.34	*	0.00026	=	1.70	lbs/day
COD	4650	*	8.34	*	0.00026	=	10.1	lbs/day
Ammonia	10.6	*	8.34	*	0.00026	=	0.0230	lbs/day
Cadmium (Cd)	0.005	*	8.34	*	0.00026	=	0.0000108	lbs/day
Copper (Cu)	3.25	*	8.34	*	0.00026	=	0.0070	lbs/day
Lead (Pb)	0.015	*	8.34	*	0.00026	=	0.000033	lbs/day
Zinc (Zn)	0.600	*	8.34	*	0.00026	=	0.00130	lbs/day
Mercury (Hg)	0.00040	*	8.34	*	0.00026	=	0.00000087	lbs/day

Based on the calculations above and due to a lack of historical data for the industrial discharge, MDEQ proposes that the permittee be required to monitor its discharge for the metals parameters listed above that are directly limited by the POTW’s NPDES permit. After a period of 180 days, the permittee will be required to resubmit the Form 2P application with the results of the required monitoring. If evaluation of the additional data reveals a need for numeric limitations or increased monitoring requirements, the permit may be reopened and modified accordingly. The proposed permit limitations for the initial issuance of this permit are detailed in the flowing section.

V. PROPOSED PERMIT LIMITATIONS

Parameter	Current Permit Limits (CPL)		Proposed Permit Limits (PPL)				Basis
	Avg. (mg/L)	Max. (mg/L)	Avg. (lb/day)	Max. (lb/day)	Avg. (mg/L)	Max. (mg/L)	
Cadmium, TR	-----	-----	-----	-----	Report	Report	BTJ
Copper, TR	-----	-----	-----	-----	Report	Report	BTJ
Lead, TR	-----	-----	-----	-----	Report	Report	BTJ
Mercury, TR	-----	-----	-----	-----	Report	Report	BTJ
Zinc, TR	-----	-----	-----	-----	Report	Report	BTJ
Flow	-----	-----	-----	-----	Report MGD	Report MGD	BTJ
pH	-----	-----	-----	-----	6.0 min. SU	9.0 max. SU	BTJ

TR = Total Recoverable; BTJ = Best Technical Judgement

Cadmium (TR), Copper (TR), Lead (TR), Zinc (TR), and Mercury (TR) shall be monitored monthly via grab sampling. pH shall be monitored weekly via grab sampling. Flow shall be monitored daily via instantaneous measurement.

Within 6 months (180 days) after permit issuance, the permittee shall submit a complete Pretreatment Form 2P application containing updated data from the permitted discharge. Based upon the results of the analysis, the permit may be reopened and modified to reflect this data.

Allowable Concentration screening for metals will be calculated after sufficient data from the facility and POTW has been obtained.

A public notice will be required for this permit issuance.

APPENDIX A

ADEQUACY OF TREATMENT

Date: April 8, 2026
Permit Writer: Bill Stacy
Proposed Site: Packaging Corporation of America
Pretreatment Permit No. MSP092472

Address: 8489 Summit Cove
Olive Branch, MS 38654
DeSoto County

Proposed Hydraulic Loading: 0.00026 MGD
Proposed Organic Loading: 786 mg/L
786 mg/L*8.34*0.00026 MGD = 1.70 lb/day

DeSoto County Regional Utility Authority, Metro DeSoto WWTP
NPDES Permit No. MS0028479, AI No. 3129

Permitted Flow: 0.537 MGD avg. (Phase I)
12 Months Flow: 0.431 MGD max. avg. value (from August 2025 – February 2026 DMRs
*View Inc. ceased discharge to Metro WWTF in August 2025)
12 Months BOD₅: 747 lb/day max. avg. influent value (from August 2025 – February 2026
DMRs)

Evaluation of Flow

0.537 MGD permitted – 0.431 MGD actual = 0.106 MGD
0.106 MGD available vs. 0.00026 MGD proposed increase

Evaluation of BOD₅

Permitted flow 537,000 gpd/(100 gallons/person/day) = 5,370 population equivalency
5,370*0.17 lb BOD/person/day = 913 lb/day BOD capacity
913 lb/day available – 747 lb/day actual = 166 lb/day
166 lb/day available vs. 1.70 lb/day proposed increase

*Note: Because discharge has been occurring prior to application for a pretreatment permit, the contribution from PCA is already captured in the existing POTW flow and loading data shown above, but is treated as additional contributory flow for the purposes of this calculation.