Permit Number: AR0001210
AFIN: 02-00013

AUTHORIZATION TO DISCHARGE WASTEWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. § 1251 et seq.),

Georgia-Pacific Crossett LLC
Crossett Paper Operations

is authorized to discharge process wastewater [Paper Mill (tissue machines, utilities area, and product stewardship waters), Bakelite (thermosetting resins including urea formaldehyde resin, phenol formaldehyde resin, urea formaldehyde concentrate, and spray dried resins), and Ingevity Chemical Plant (rosin based derivatives, tall oil fractionation, sizing agents, and derivatives)], sanitary wastewater (from the Paper Mill and the City of Crossett), landfill leachate, and site stormwater from a facility located as follows: 100 Mill Supply Road, Crossett, AR 71635, in Ashley County.

Facility Coordinates: Latitude: 33° 08’ 28.20” N; Longitude: 91° 58’ 13.45” W

Discharge is to:
Outfall 001: through a man-made channel to the upper reaches of the treatment pond Mossy Lake, then into Coffee Creek, then into the Ouachita River in Segment 2D of the Ouachita River Basin.
Outfall 002, when the gauge at the Felsenthal Lock and Dam is below 62 feet: from the outfall structure for the treatment pond Mossy Lake to Coffee Creek, then into the Ouachita River in Segment 2D of the Ouachita River Basin.
Outfall 002, when the gauge at the Felsenthal Lock and Dam is at or exceeds 62 feet: the outfall structure at Outfall 002 is inundated by the Ouachita River in Segment 2D of the Ouachita River Basin.

The outfalls are located at the following coordinates:

Outfall 001:	Latitude : 33° 06’ 22.55”;	Longitude: 92° 02’ 17.2”
Outfall 002:	Latitude : 33° 01’ 58”;	Longitude: 92° 04’ 25”

Discharge shall be in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit. Per Part III.D.10, the permittee must re-apply 180 days prior to the expiration date below for permit coverage to continue beyond the expiration date.

Effective Date: July 1, 2025
Expiration Date: June 30, 2030

Digitally signed by Stacie R. Wassell
Date: 2025.06.30 08:03:13 -05'00'

Stacie R. Wassell
Associate Director, Office of Water Quality
Arkansas Department of Energy and Environment
Division of Environmental Quality

June 30, 2025
Issue Date

PART I
PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 001 - process wastewater [Paper Mill (tissue machines, utilities area, and product stewardship waters), Bakelite (thermosetting resins including urea formaldehyde resin, phenol formaldehyde resin, urea formaldehyde concentrate, and spray dried resins), and Ingevity Chemical Plant (rosin based derivatives, tall oil fractionation, sizing agents, and derivatives)], sanitary wastewater (from the Paper Mill and the City of Crossett), landfill leachate, and site stormwater.

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below as well as Parts II and III. See Part IV for all definitions.

TIER I – The following limits are effective in the event that Fecal Coliform Bacteria criteria are **not** removed from Rule 2 (8 CAR Part 21). See Part II.16 for details.

Effluent Characteristics	**Discharge Limitations**				**Monitoring Requirements**	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow	N/A	N/A	Report, MGD	Report, MGD	once/day	totalizing meter
Biochemical Oxygen Demand (BOD_5)	8,669	15,853	105	192	Once/week	24-hr composite[4]
Total Suspended Solids (TSS)	7,291	14,779	88.3	179	Once/week	24-hr composite[4]
Total Recoverable Copper[3, 5]	1.5	3.1	18.75 µg/l	37.62 µg/l	Once/6 months	24-hr composite[4]
Total Recoverable Zinc[3, 5]	16.1	32.2	194.58 µg/l	390.41 µg/l	Once/6 months	24-hr composite[4]
Total Phosphorus	Report	Report	Report	Report	Once/month[7]	24-hr composite[4]
Nitrates as Nitrogen 00620	Report	Report	Report	Report	Once/month[7]	24-hr composite[4]
Fecal Coliform Bacteria (FCB)			col/100 ml			
(May – September) **INTERIM**[6]	N/A	N/A	Report	Report	Once/month	Grab
(October – April) **INTERIM**[6]	N/A	N/A	Report	Report	Once/month	Grab
(May – September) **FINAL**[6]	N/A	N/A	200	400	Once/month	Grab
(October – April) **FINAL**[6]	N/A	N/A	1000	2000	Once/month	Grab
pH	N/A	N/A	Minimum 6.0 s.u.	Maximum 9.0 s.u.	Three/week	Grab

Effluent Characteristics	Discharge Limitations				Monitoring Requirements	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Chronic WET Testing[1]						
***Pimephales promelas* (Chronic)[1]**	N/A		7-Day Minimum			
Pass/Fail Lethality (7-day NOEC) TLP6C			Report (Pass=0/Fail=1)		once/quarter	composite
Pass/Fail Growth (7-day NOEC) TGP6C			Report (Pass=0/Fail=1)		once/quarter	composite
Survival (7-day NOEC) TOP6C			Report %		once/quarter	composite
Coefficient of Variation (Growth) TQP6C			Report %		once/quarter	composite
Growth (7-day NOEC) TPP6C			Report %		once/quarter	composite
Pass/Fail Retest 1 (7-day NOEC) 22418			Report (Pass=0/Fail=1)		once/month[2]	composite
Pass/Fail Retest 2 (7-day NOEC) 22419			Report (Pass=0/Fail=1)		once/month[2]	composite
Pass/Fail Retest 3 (7-day NOEC) 51444			Report (Pass=0/Fail=1)		once/month[2]	composite
***Ceriodaphnia dubia* (Chronic)[1]**			7-Day Minimum			
Pass/Fail Lethality (7-day NOEC) TLP3B			Report (Pass=0/Fail=1)		once/quarter	composite
Pass/Fail Reproduction (7-day NOEC) TGP3B			Report (Pass=0/Fail=1)		once/quarter	composite
Survival (7-day NOEC) TOP3B			Report %		once/quarter	composite
Coefficient of Variation (Reproduction) TQP3B			Report %		once/quarter	composite
Reproduction (7-day NOEC) TPP3B			Report %		once/quarter	composite
Pass/Fail Retest 1 (7-day NOEC) 22415			Report (Pass=0/Fail=1)		once/month[2]	composite
Pass/Fail Retest 2 (7-day NOEC) 22416			Report (Pass=0/Fail=1)		once/month[2]	composite
Pass/Fail Retest 3 (7-day NOEC) 51443			Report (Pass=0/Fail=1)		once/month[2]	composite

1. See Part II.7 (WET Testing Requirements).
2. CONDITIONAL REPORTING: Use only if conducting retests due to a test failure (demonstration of significant toxic effects at or below the critical dilution). If testing on a quarterly basis, the permittee may substitute one of the retests in lieu of one routine toxicity test. If retests are not required, Report NODI=9 (Conditional Monitoring - Not Required This Period) under retest parameters (reported on a quarterly DMR). This condition applies to *P. promelas* and *C. dubia*.
3. See Part II.6 (Metals Test Methods). Monitoring is required only when the **treatment pond Mossy Lake is flooded.** A flooded state is defined as the period when the gauge at the Felsenthal Lock and Dam exceeds 62 feet and also for the two weeks following the recession of flood waters below 62 feet.
4. Samples shall be time-proportional composites. The permittee must collect a fixed volume of discrete sample aliquots in one container at constant time intervals by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hr period.
5. Water quality based limit from Outfall 002 to ensure metals testing occurs when monitoring at the treatment pond Mossy Lake cannot be conducted due to flooding.
6. Interim FCB limits are applicable beginning on the effective date of the permit and lasting until three years after the effective date of the permit. Final FCB limits are applicable beginning three years after the effective date of the permit and lasting until the date of expiration.
7. Monitoring for Total Phosphorus and Nitrates as Nitrogen are reduced to once/year provided that the facility does not add a nutrient blend (as detailed in Part II.9) to the treatment system. The permittee must report quantitative data for Total Phosphorus and Nitrates as Nitrogen on at least one monthly DMR each calendar year. The remaining months may be marked and reported as NODI=9 (Conditional Monitoring – Not Required This Period) provided that a nutrient blend is not added to the treatment system during that month.

Oil, grease, or petrochemical substances shall not be present in receiving waters to the extent that they produce globules or other residue or any visible, colored film on the surface or coat the banks and/or bottoms of the waterbody or adversely affect any of the associated biota. There shall be no visible sheen as defined in Part IV of this permit.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples shall be taken following the aeration basin at Latitude : 33° 06’ 22.5”; Longitude: 92° 02’ 17.2”.

PART I
PERMIT REQUIREMENTS

SECTION A. INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 001 - process wastewater [Paper Mill (tissue machines, utilities area, and product stewardship waters), Bakelite (thermosetting resins including urea formaldehyde resin, phenol formaldehyde resin, urea formaldehyde concentrate, and spray dried resins), and Ingevity Chemical Plant (rosin based derivatives, tall oil fractionation, sizing agents, and derivatives)], sanitary wastewater (from the Paper Mill and the City of Crossett), landfill leachate, and site stormwater.

During the period beginning on the effective date and lasting three years, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below as well as Parts II and III. See Part IV for all definitions.

TIER II – The following limits are effective in the event that Fecal Coliform Bacteria criteria are removed from Rule 2 (8 CAR Part 21). See Part II.16 for details.

Effluent Characteristics	**Discharge Limitations**				**Monitoring Requirements**	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow	N/A	N/A	Report, MGD	Report, MGD	once/day	totalizing meter
Biochemical Oxygen Demand (BOD_5)	8,669	15,853	105	192	Once/week	24-hr composite[4]
Total Suspended Solids (TSS)	7,291	14,779	88.3	179	Once/week	24-hr composite[4]
Total Recoverable Copper[3, 5]	1.5	3.1	18.75 µg/l	37.62 µg/l	Once/6 months	24-hr composite[4]
Total Recoverable Zinc[3, 5]	16.1	32.2	194.58 µg/l	390.41 µg/l	Once/6 months	24-hr composite[4]
Total Phosphorus	Report	Report	Report	Report	Once/month[7]	24-hr composite[4]
Nitrates as Nitrogen 00620	Report	Report	Report	Report	Once/month[7]	24-hr composite[4]
E. coli			col/100 ml			
(May – September) **INTERIM**[6]	N/A	N/A	Report	Report	Once/month	Grab
(October – April) **INTERIM**[6]	N/A	N/A	Report	Report	Once/month	Grab
(May – September) **FINAL**[6]	N/A	N/A	126	410	Once/month	Grab
(October – April) **FINAL**[6]	N/A	N/A	630	2050	Once/month	Grab
pH	N/A	N/A	Minimum 6.0 s.u.	Maximum 9.0 s.u.	Three/week	Grab

Effluent Characteristics	Discharge Limitations				Monitoring Requirements	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Chronic WET Testing[1]						
***Pimephales promelas* (Chronic)[1]**	N/A		7-Day Minimum			
Pass/Fail Lethality (7-day NOEC) TLP6C			Report (Pass=0/Fail=1)		once/quarter	composite
Pass/Fail Growth (7-day NOEC) TGP6C			Report (Pass=0/Fail=1)		once/quarter	composite
Survival (7-day NOEC) TOP6C			Report %		once/quarter	composite
Coefficient of Variation (Growth) TQP6C			Report %		once/quarter	composite
Growth (7-day NOEC) TPP6C			Report %		once/quarter	composite
Pass/Fail Retest 1 (7-day NOEC) 22418			Report (Pass=0/Fail=1)		once/month[2]	composite
Pass/Fail Retest 2 (7-day NOEC) 22419			Report (Pass=0/Fail=1)		once/month[2]	composite
Pass/Fail Retest 3 (7-day NOEC) 51444			Report (Pass=0/Fail=1)		once/month[2]	composite
***Ceriodaphnia dubia* (Chronic)[1]**			7-Day Minimum			
Pass/Fail Lethality (7-day NOEC) TLP3B			Report (Pass=0/Fail=1)		once/quarter	composite
Pass/Fail Reproduction (7-day NOEC) TGP3B			Report (Pass=0/Fail=1)		once/quarter	composite
Survival (7-day NOEC) TOP3B			Report %		once/quarter	composite
Coefficient of Variation (Reproduction) TQP3B			Report %		once/quarter	composite
Reproduction (7-day NOEC) TPP3B			Report %		once/quarter	composite
Pass/Fail Retest 1 (7-day NOEC) 22415			Report (Pass=0/Fail=1)		once/month[2]	composite
Pass/Fail Retest 2 (7-day NOEC) 22416			Report (Pass=0/Fail=1)		once/month[2]	composite
Pass/Fail Retest 3 (7-day NOEC) 51443			Report (Pass=0/Fail=1)		once/month[2]	composite

1. See Part II.7 (WET Testing Requirements).
2. CONDITIONAL REPORTING: Use only if conducting retests due to a test failure (demonstration of significant toxic effects at or below the critical dilution). If testing on a quarterly basis, the permittee may substitute one of the retests in lieu of one routine toxicity test. If retests are not required, Report NODI=9 (Conditional Monitoring - Not Required This Period) under retest parameters (reported on a quarterly DMR). This condition applies to *P. promelas* and *C. dubia*.
3. See Part II.6 (Metals Test Methods). Monitoring is required only when the **treatment pond Mossy Lake is flooded.** A flooded state is defined as the period when the gauge at the Felsenthal Lock and Dam exceeds 62 feet and also for the two weeks following the recession of flood waters below 62 feet.
4. Samples shall be time-proportional composites. The permittee must collect a fixed volume of discrete sample aliquots in one container at constant time intervals by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hr period.
5. Water quality based limit from Outfall 002 to ensure metals testing occurs when monitoring at the treatment pond Mossy Lake cannot be conducted due to flooding.
6. Interim *E. coli* limits are applicable beginning on the effective date of the permit and lasting until three years after the effective date of the permit. Final *E. coli* limits are applicable beginning three years after the effective date of the permit and lasting until the date of expiration.
7. Monitoring for Total Phosphorus and Nitrates as Nitrogen are reduced to once/year provided that the facility does not add a nutrient blend (as detailed in Part II.9) to the treatment system. The permittee must report quantitative data for Total Phosphorus and Nitrates as Nitrogen on at least one monthly DMR each calendar year. The remaining months may be marked and reported as NODI=9 (Conditional Monitoring – Not Required This Period) provided that a nutrient blend is not added to the treatment system during that month.

Oil, grease, or petrochemical substances shall not be present in receiving waters to the extent that they produce globules or other residue or any visible, colored film on the surface or coat the banks and/or bottoms of the waterbody or adversely affect any of the associated biota. There shall be no visible sheen as defined in Part IV of this permit.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples shall be taken following the aeration basin at Latitude : 33° 06’ 22.5”; Longitude: 92° 02’ 17.2”.

PART I
PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: Outfall 002 – from the outfall structure for the Treatment Pond Mossy Lake to Coffee Creek.

During the period beginning on the effective date of this permit and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 002. Such discharges shall be limited and monitored by the permittee as specified below.

Effluent Characteristics	**Discharge Limitations**				**Monitoring Requirements**[1]	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow (MGD)	N/A	N/A	Report	Report	Daily	Totalizing Meter
Biochemical Oxygen Demand (BOD_5)						
October – July	8000	12000	Report	Report	Once/week	24-hr composite[4]
August	7262	10893	Report	Report	Once/week	24-hr composite[4]
September	5911	8867	Report	Report	Once/week	24-hr composite[4]
Total Suspended Solids (TSS)	18000	30000	Report	Report	Once/week	24-hr composite[4]
Total Recoverable Copper[2]	1.5	3.1	18.75 µg/l	37.62 µg/l	Once/6 months	Grab
Total Recoverable Zinc[2]	16.1	32.2	194.58 µg/l	390.41 µg/l	Once/6 months	Grab
Total Phosphorous	Report	Report	Report	Report	Once/month[5]	24-hr composite[4]
Nitrates as Nitrogen 00620	Report	Report	Report	Report	Once/month[5]	24-hr composite[4]
pH	N/A	N/A	Minimum 6.0 s.u.	Maximum 9.0 s.u.	Three/week	Grab

1 Monitoring is only required **when treatment pond Mossy Lake is not flooded.** A flooded state is defined as the period when the gauge at the Felsenthal Lock and Dam exceeds 62 feet and also for the two weeks following the recession of flood waters below 62 feet.
2 See Condition No. 6 of Part II (Metals Test Methods).
3 Reserved.
4 Samples shall be time-proportional composites. The permittee must collect a fixed volume of discrete sample aliquots in one container at constant time intervals by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hr period.
5 Monitoring for Total Phosphorus and Nitrates as Nitrogen are reduced to once/year provided that the facility does not add a nutrient blend (as detailed in Part II.9) to the treatment system. The permittee must report quantitative data for Total Phosphorus and Nitrates as Nitrogen on at least one monthly DMR each calendar year. The remaining months may be marked and reported as NODI=9 (Conditional Monitoring – Not Required This Period) provided that a nutrient blend is not added to the treatment system during that month.

Oil, grease, or petrochemical substances shall not be present in receiving waters to the extent that they produce globules or other residue or any visible, colored film on the surface or coat the banks and/or bottoms of the waterbody or adversely affect any of the associated biota. There shall be no visible sheen as defined in Part IV of this permit.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: at the Outfall 002, at sampling point for the outfall structure, after treatment pond Mossy Lake and prior to Coffee Creek at the following coordinates: Latitude : 33° 01’ 58”; Longitude: 92° 04’ 25”.

SECTION B. PERMIT COMPLIANCE SCHEDULE

Until FCB is removed from Rule 2 (8 CAR Part 21), the compliance schedule is applicable only to FCB. When FCB is removed from Rule 2 (8 CAR Part 21), the compliance schedule will become applicable only to *E. coli*. In either event, the final limits must be met no later than three years from the effective date of the permit.

Compliance with the Final Effluent Limitations for FCB or *E. coli* is required three years after the effective date of the permit. The permittee shall submit progress reports addressing the progress towards attaining the Final Effluent Limitations for the aforementioned parameters according to the following schedule:

ACTIVITY	**DUE DATE**
Progress Report[1, 2]	One (1) year from effective date
Progress Report[1, 3]	Two (2) years from effective date
Achieve Final Compliance[4]	Three (3) years from effective date

All progress reports must be submitted to the Division at the following address:

Enforcement Branch
Office of Water Quality
Division of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Information can also be submitted electronically via email at EE.Water.Enforcement.Report@arkansas.gov

1 If the permittee is already in compliance with a Final Effluent Limitation, only a certification of compliance with the final limit will be required for the progress reports for that parameter.

2 If the permittee is not in compliance with a Final Effluent Limitation, the progress report must detail how the permittee plans to come into compliance with the final limits within the remaining two (2) years of the interim period. The progress report must list the options that were considered and justification for the chosen option must be included. Any Best Management Practices (BMPs) that have been instituted to reduce the concentration in the influent must also be discussed. If a study will be performed, a milestone schedule for the study must be provided.

The permittee has the option to undertake any study deemed necessary to meet the final limitations during the interim period. Any additional treatment (including chemical addition) must be approved (including any necessary construction permits) prior to installation.

3 If the permittee is not in compliance with a Final Effluent Limitation, the second Progress Report must contain an update on the status of the chosen option from the initial Progress Report. If the facility is not meeting any of the milestones provided in the initial Progress Report, the facility must update the milestone schedule to show how the final limits will be met by the deadline.

[4] A final Progress Report must be submitted no later than fourteen (14) days following the final compliance date and include a certification that the final effluent limit was met on the effective date and that the limits are still being met.

PART II
OTHER CONDITIONS

1. The operator of this wastewater treatment facility shall hold an Advanced Industrial license from the State of Arkansas in accordance with PC&EC Rule 3.

2. In accordance with 40 C.F.R. §§ 122.62(a)(2) and 124.5, this permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations when new information is received that actual or potential exceedance of State water quality criteria and/or narrative criteria are determined to be the result of the permittee's discharge(s) to a relevant water body or a Total Maximum Daily Load (TMDL) is established or revised for the water body that was not available at the time of the permit issuance that would have justified the application of different permit conditions at the time of permit issuance.

3. Other Specified Monitoring Requirements§

   The permittee may use alternative appropriate monitoring methods and analytical instruments other than as specified in Part I Section A of the permit without a major permit modification under the following conditions:

   - The monitoring and analytical instruments are consistent with accepted scientific practices.
   - The requests shall be submitted in writing to the Permits Branch of the Office of Water Quality of the DEQ for use of the alternate method or instrument.
   - The method and/or instrument is in compliance with 40 C.F.R. Part 136 or approved in accordance with 40 C.F.R. § 136.5.
   - All associated devices are installed, calibrated, and maintained to ensure the accuracy of the measurements and are consistent with the accepted capability of that type of device. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Assurance/Quality Control (QA/QC) program.

   Upon written approval of the alternative monitoring method and/or analytical instruments, these methods or instruments must be consistently utilized throughout the monitoring period. DEQ must be notified in writing and the permittee must receive written approval from DEQ if the permittee decides to return to the original permit monitoring requirements.

4. Reserved.

5. The permittee is required to use a laboratory accredited pursuant to Ark. Code Ann. § 8-2-201 et seq. until the permittee complies fully with Order and Agreement paragraph 6 of Consent Administrative Order LIS 22-031, with the exception of grab pH analysis.

6. The permittee may use any EPA approved method based on 40 C.F.R. Part 136 provided the minimum quantification level (MQL) for the chosen method is equal to or less than what has been specified in chart below:

Pollutant	MQL (µg/l)
Total Recoverable Copper	0.5
Total Recoverable Mercury	0.005
Total Recoverable Zinc	20

The permittee may develop a matrix specific method detection limit (MDL) in accordance with Appendix B of 40 C.F.R. Part 136. For any pollutant for which the permittee determines a site specific MDL, the permittee shall send to DEQ, NPDES Permits Branch, a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that a site specific MDL was correctly calculated. A site specific MQL shall be determined in accordance with the following calculation:

$$MQL = 3.3 \times MDL$$

Upon written approval by the Permits Branch, the site specific MQL may be utilized by the permittee for Discharge Monitoring Report (DMR) calculations and reporting requirements.

7. WHOLE EFFLUENT TOXICITY TESTING (7 DAY CHRONIC NOEC)

It is unlawful and a violation of this permit for a permittee or their designated agent to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by EPA Region 6 or the State NPDES permitting authority (DEQ).

A. SCOPE AND METHODOLOGY

i. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

Applicable To Final Outfall	001
Reported On DMR As Final Outfall	001
Critical Dilution (%)	7
Effluent Dilution Series (%)	3, 4, 5, 7, 9
Testing Frequency:	Once/Quarter
Sample Type	"Composite Sample (defined in Paragraph B.iii)"
Test Species/Methods:	40 C.F.R. Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA-821-R-02-013, or the most recent update thereof.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA-821-R-02-013, or the most recent update thereof.

ii. The NOEC (No Observed Effect Concentration) is herein defined as the greatest effluent dilution at and below which toxicity that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution. Chronic sub-lethal test failure is defined as a demonstration of a statistically significant sub-lethal effect (i.e., growth or reproduction) at test completion to a test species at or below the critical dilution.

iii. This permit may be reopened to require WET limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

B. REQUIRED TEST ACCEPTABILITY CRITERIA AND TEST CONDITIONS

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

Condition/Criteria	***Ceriodaphnia dubia***	***Pimephales promelas***
Test Duration	Until 60% or more of surviving control females have 3 broods (max 8 days)	7 days
# of replicates per concentration	10	5
# of organisms per replicate	1	8
# of organisms per concentration	10	40 (minimum)
# of test concentrations per effluent	5 and a control	5 and a control
Sample Holding Time *	36 hours for first use	36 hours for first use
Sampling Requirement *	Minimum of 3 samples	Minimum of 3 samples
Test Acceptability Criteria	≥80% survival of all control organisms.	≥80% survival of all control organisms.
	Mean of 15 or more neonates per surviving control female.	Mean dry weight per surviving organism in control must be ≥0.25mg.
	60% of surviving control females must produce 3 broods.	

Coefficient of Variation **	40% or less, unless significant effects are exhibited.	40% or less, unless significant effects are exhibited.
Percent Minimum Significant Difference (PMSD range) for Sub-lethal Endpoint **	13 – 47	12–30

* If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples and the minimum number of effluent portions are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent, and must meet the holding time between collection and first use of the sample. When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item C of this section.

** Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%, or a PMSD value greater than the higher value on the range provided.

i. Statistical Interpretation

The statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in the appropriate method manual listed in Part II or the most recent update thereof.

ii. Dilution Water

a. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for:

(1) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

(2) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

b. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

(1) a synthetic dilution water control which fulfills the test acceptance requirements was run concurrently with the receiving water control;

(2) the test indicating receiving water toxicity has been carried out to completion;

(3) the permittee includes all test results indicating receiving water toxicity with the full report and information required; and

(4) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

iii. Samples and Composites

a. The permittee shall collect a minimum of three samples (flow-weighted composite if possible) from the outfall(s).

b. The permittee shall collect a second and third sample (composite samples if possible) for use during the 24-hour renewal of each dilution concentration for each test. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours for first use of the sample. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 0–6 degrees Centigrade during collection, shipping, and storage. A holding time up to 72 hours is allowed upon notification to DEQ of the need for additional holding time.

c. The permittee must collect the composite samples such that the effluent samples are representative of the discharge duration, and of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

C. REPORTING

i. The permittee shall prepare a full report of the results of all tests conducted pursuant to this part in accordance with the Report Preparation Section of the most current publication of the method manual, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report and submit them to the Division via NetDMR. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for Division review.

ii. A valid test for each species must be reported during each reporting period specified in PART I of this permit unless the permittee is performing a Toxicity Reduction Evaluation (TRE) that may increase the frequency of testing and reporting. One set of

biomonitoring data for each species is to be recorded on the DMR for each reporting period. Additional results are reported under the retest codes below.

iii. The permittee shall submit the results of each valid toxicity test on the subsequent DMR for that reporting period as follows below. Submit retest information clearly marked as such with the subsequent DMR. Only results of valid tests are to be reported on the DMR.

Reporting Requirement	**Parameter STORET CODE**	
	Ceriodaphnia dubia	*Pimephales promelas*
Enter a "1" if the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, otherwise enter a "0."	TLP3B	TLP6C
Report the NOEC value for survival	TOP3B	TOP6C
Enter a "1" if the NOEC for growth or reproduction is less than the critical dilution, otherwise enter a "0."	TGP3B	TGP6C
Report the NOEC value for growth or reproduction	TPP3B	TPP6C
Report the highest (critical dilution or control) Coefficient of Variation	TQP3B	TQP6C
(If required) Retest 1 – Enter a "1" if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter "0." (reported on quarterly DMR)*	22415	22418
(If required) Retest 2- Enter a "1" if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter "0." (reported on quarterly DMR)*	22416	22419
(If required) Retest 3- Enter a "1" if the NOEC for survival, growth or reproduction is less than the critical dilution, otherwise enter "0." (reported on quarterly DMR)*	51443	51444

* If retests are not required, Report NODI=9 (Conditional Monitoring - Not Required This Period).

iv. DMR parameters

Report the following parameters on the DMR:

Scheduled DMR: TLP6C, TOP6C, TPP6C, TGP6C, TQP6C, 22418, 22419, 51444, TLP3B, TOP3B, TPP3B, TGP3B, TQP3B, 22415, 22416, and 51443.

D. MONITORING FREQUENCY REDUCTION

i. The permittee may apply for a testing frequency reduction upon the successful completion of the first four consecutive quarters of testing for a test species, with no lethal or sub-lethal effects demonstrated at or below the critical dilution. If granted, the monitoring frequency for that test species may be reduced to not less than once per six months.

ii. Certification - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria above. In addition, the permittee must provide a list with each test performed including test initiation date, species, and NOECs. Upon review and acceptance of this information, the Division will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the Division's SEEK Branch to update the permit reporting requirements.

iii. Failures - If any test demonstrates lethal or sub-lethal effects at or below the critical dilution at any time during the life of this permit, three monthly retests are required. If a frequency reduction had been granted, the monitoring frequency for the affected test species reverts to once per quarter until the permit is re-issued.

iv. This monitoring frequency reduction applies only until the expiration date of this permit, at which time the monitoring frequency for both test species reverts to once per quarter until the permit is re-issued.

v. For administratively continued facilities where permit renewal was held up by no fault of the permittee, the following language regarding WET testing frequency reduction applies after permit renewal:

The permittee may apply for a testing frequency reduction upon the successful completion of the first four consecutive quarters of testing after the expiration date of the previous permit, for one or both test species, provided that all of the following conditions are met:

a. The permittee tested quarterly upon the expiration date of that permit, and

b. The issuance of the renewed permit was not delayed by any fault of the permittee, and

c. No lethal or sub-lethal effects are demonstrated at or below the critical dilution for the first four consecutive quarters of testing after the expiration date of the previous permit.

E. PERSISTENT TOXICITY

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal and/or sub-lethal effects at or below the critical dilution. Significant toxic effects are herein defined as a statistically significant difference at the 95% confidence level between the survival, growth, or reproduction of the appropriate test organism in a specified effluent dilution and the control (0% effluent). If the initial WET test conducted

fails, the permittee will conduct three consecutively monthly retests. The purpose of retests is to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result.

i. Retest

The permittee shall conduct a total of three (3) additional tests for any species that demonstrates significant effects at or below the critical dilution. The three additional tests shall be conducted monthly (one test per month) during the next three consecutive months. If testing on a quarterly basis, the permittee may substitute one of the additional tests in lieu of one routine toxicity test. A full report shall be prepared for each test required by this section in accordance with the reporting requirements previously outlined and submitted to the Division.

ii. Requirement to Initiate a Toxicity Reduction Evaluation

If persistent lethality is demonstrated by failure of one or more retests, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in Part F of this section. If persistent sub-lethality is demonstrated by failure of two or more retests, the permittee shall initiate TRE requirements. The permittee shall notify DEQ in writing within 5 days of notification of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest for lethal TREs or second failed retest for sub-lethal TREs. A TRE may also be required due to a demonstration of intermittent effects at or below the critical dilution or for failure to perform the required retests.

F. TOXICITY REDUCTION EVALUATION (TRE)

EPA Region 6 is currently addressing TREs as follows: A TRE is triggered following three sub-lethal test failures (a failure followed by two retest failures) or two test failures with lethal effects (a failure followed by one retest failure).

i. Within ninety (90) days of confirming lethality and/or sub-lethality in the retests, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE to DEQ. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A TRE is an investigation intended to determine those actions necessary to achieve compliance with water quality based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step wise process that combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods that will reduce the effluent toxicity. The TRE Action Plan shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:

a. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity

characterizations, a Toxicity Identification Evaluation (TIE) and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Identification Evaluations to characterize the nature of the constituents causing toxicity, the permittee shall perform multiple characterizations and follow the procedures specified in the documents "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA 600/6-91/003) or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081), as appropriate.

b. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified; Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where toxicity was demonstrated within 24 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;

c. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and

d. Project Organization (e.g., project staff, project manager, consulting services, etc.).

ii. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal.

iii. The permittee shall submit a quarterly TRE Activities Report to DEQ in the months of January, April, July, and October, containing information on toxicity reduction evaluation activities including:

a. Any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;

b. Any studies/evaluations and results on the treatability of the facility's effluent toxicity; and

c. Any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant toxicity at the critical dilution.

d. Any results and interpretation of any chemical specific analysis, and for any characterization, identification, and confirmation tests performed during the quarter.

e. Any changes to the initial TRE plan and schedule that are believed necessary.

iv. Finalizing a TRE

The permittee shall submit (to DEQ) a final report on TRE activities no later than twenty-eight (28) months from confirming toxicity in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant toxicity at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A TRE may be stopped if there is no toxicity at the critical dilution for a period of 12 consecutive months (with at least monthly testing) following confirmation of toxicity in the retests. The permittee would submit a final report to DEQ at that time.

v. Quarterly testing during the TRE is a minimum monitoring requirement. EPA recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 C.F.R. § 122.44(d)(1)(v).

8. The permittee has certified that no chlorophenolic biocides are currently in use. Any anticipated use of these biocides will require notification to DEQ as specified in 40 C.F.R. § 122.61(a).

9. The DEQ has a Safety Data Sheet (SDS) on file (https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_Material%20Safety%20Date%20Sheet%20for%20MacroGro_20090605.pdf) for the nutrient blend (MacroGro GPC-30 Wastewater Nutrient Blend), which lists the Nitrogen content as 15 – 27% N by weight and the Phosphorus content as 3 – 15% P_2O_5 by weight. The permittee must receive written permission from DEQ prior to changing the nutrient blend added to the treatment process for biological activity if the change may cause or causes the Nitrogen or Phosphorus to be outside of the listed range. The permittee shall use BMPs to ensure that nutrients are not added in excess of the amount necessary to promote biological activity in the treatment process.

10. Permit Conditions for Accepting City of Crossett Wastewater

Georgia-Pacific (GP) and the City of Crossett (the City) must maintain the agreement for the discharge of the City's treated effluent into GP's wastewater treatment system. The agreement must continue to state that the City will have a Pretreatment Program meeting applicable parts of 40 C.F.R. Part 403, and the agreement will establish treatment standards for BOD_5 and TSS for the City's treated effluent that are submitted to and approved by the DEQ. The agreement

must also continue to address the notifications that the City must provide to GP and the DEQ in the event of potential changes in its discharge due to new significant dischargers or changes in their wastewater characteristics. The agreement with the City of Crossett must continue to stipulate that monitoring records of the City's flow, BOD_5, and TSS will be maintained by the city for a minimum of three years to ascertain compliance with the Agreement. For the purposes of this condition, "Pretreatment Program" means a program to at minimum meet the General and Specific Pretreatment Prohibitions and reporting requirements in 40 C.F.R. § 403.

11. General Condition for Plant Operations

    In addition to the normal wastewater discharge, this NPDES permit authorizes discharges associated with or resulting during essential maintenance, regularly scheduled maintenance, during startup and shutdown, spills and release (whether anticipated or unanticipated) from anywhere in the permitted facility, as long as they are amenable to treatment, routed to the plant's wastewater treatment system and effluent limitations are met. In addition, discharges that are necessary to prevent loss of life, personal injury or severe property damage, as long as there are no feasible alternatives available, are also authorized by this permit, so long as effluent limitations are met.

12. Stormwater runoff commingling with other process waster discharged from Outfall 001 shall be managed in accordance with the Best Management Practices (BMPs), as defined in Part IV.7, in the form of a stormwater pollution prevention plan (SWPPP) to control the quality of stormwater discharges associated with industrial activity that are authorized by this permit. The permittee must amend the BMPs whenever there is a change in the facility or a change in the operation of the facility. Use of BMPs in lieu of numeric effluent limitations in NPDES permits is authorized under 40 C.F.R. § 122.44(k) when the Permitting Authority finds numeric effluent limitations to be infeasible to carry out the purposes of the Clean Water Act.

13. The permittee must receive written permission prior to the transfer of any product stewardship waters from another Georgia-Pacific LLC facility to the Crossett facility. The request must include, at a minimum, the following items: source of the wastewaters, confirmation that the wastewaters are similar to those already being treated in the system, the need for transferring the wastewater, the volume of wastewater involved, and the dates on which the transfer will occur.

    The DEQ reserves the right to deny the request to transfer wastewaters to the Crossett facility in the event that it is determined that the exceptions to 40 C.F.R. Part 437 listed in the preamble are not met or if any transfers cause non-compliance with the terms and conditions of the permit. The DEQ also reserves the right to require additional monitoring based on the types of wastewater transferred.

14. The permittee must maintain the Mercury Minimization Plan developed under requirements in the 2010 permit renewal. The report required by the Mercury Minimization Plan shall be submitted no later than October 31 of each year.

15. Cooling Water Intake Structure Requirements (applicable to the Saline River Canal intake structure)

    1. The permittee shall operate a CWIS with a maximum through-screen design velocity of 1.5 ft/sec.
    2. The permittee shall maintain the intake screens in good working condition at all times.
    3. The permittee shall maintain the open area of the intake screens by back-flushing the screens at a minimum frequency of twice per year, or more frequently if intake flow decreases due to leaf litter, silt, sticks, etc.
    4. The permittee shall maintain records of the back-flushing events. These records shall include the date and duration of each back-flush event, and intake flow before and after each back-flush event. These records shall be kept on site and made available for inspection by Division personnel upon request.

16. Transition Condition

    Revisions are proposed to Rule 2 (8 CAR Part 21) to remove the fecal coliform bacteria (FCB) criteria and establish geometric mean *E. coli* criteria for all waters of the state. Tier I and Tier II limits have been provided to allow the permittee to change from FCB monitoring to *E. coli* monitoring if the rule is revised.

    A. The permittee must submit a Discharge Monitoring Report (DMR) for each tier on a monthly basis. The permittee must continue to submit two (2) monthly DMRs for the duration of the permit.

    B. The DMR for Tier II can be marked and submitted as NODI=9 (Conditional Monitoring – Not Required This Period) until the first full monitoring period after Rule 2 (8 CAR Part 21) has been revised to remove FCB criteria.

    C. The DMR for Tier I can be marked and submitted as NODI=9 (Conditional Monitoring – Not Required This Period) beginning with the first full monitoring period after Rule 2 (8 CAR Part 21) has been revised to remove FCB criteria.

    D. If Rule 2 (8 CAR Part 21) is revised during a monitoring period, the permittee may report under either Tier I or Tier II for that monitoring period. The other tier may be reported as NODI=9 (Conditional Monitoring – Not Required This Period).

PART III
STANDARD CONDITIONS

SECTION A – GENERAL CONDITIONS

1. **Duty to Comply**

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; and/or for denial of a permit renewal application. **Any values reported in the required Discharge Monitoring Report (DMR) which are in excess of an effluent limitation specified in Part I shall constitute evidence of violation of such effluent limitation and of this permit.**

2. **Penalties for Violations of Permit Conditions**

The Arkansas Water and Air Pollution Control Act provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than twenty-five thousand dollars ($25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars ($10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

3. **Permit Actions**

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to the following:

A. Violation of any terms or conditions of this permit.
B. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.
C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge.
D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.
E. Failure of the permittee to comply with the provisions of PC&EC Rule 9 (Permit fees) as required by Part III.A.11 herein.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4. **Toxic Pollutants**

Notwithstanding Part III.A.3, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under PC&EC Rule 2, as amended, or Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitations on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standards or prohibition and the permittee so notified.

The permittee shall comply with effluent standards, narrative criteria, or prohibitions established under PC&EC Rule 2, as amended, or Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. **Civil and Criminal Liability**

Except as provided in permit conditions for "Bypass of Treatment Facilities" (Part III.B.4), and "Upset" (Part III.B.5), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of this permit or applicable state and federal statutes or regulations which defeats the regulatory purposes of the permit may subject the permittee to criminal enforcement pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).

6. **Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Clean Water Act.

7. **State Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

8. **Property Rights**

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

9. **Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. **Applicable Federal, State or Local Requirements**

Permittees are responsible for compliance with all applicable terms and conditions of this permit. Receipt of this permit does not relieve any operator of the responsibility to comply with any other applicable federal, state, or local requirement, statute, ordinance, or regulation.

11. **Permit Fees**

The permittee shall comply with all applicable permit fee requirements (i.e., including annual permit fees following the initial permit fee that will be invoiced every year the permit is active) for wastewater discharge permits as described in PC&EC Rule 9 (Rule for the Fee System for Environmental Permits). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 C.F.R. §§ 122.64 and 124.5(d), as adopted in PC&EC Rule 6 and the provisions of PC&EC Rule 8.

SECTION B – OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. **Proper Operation and Maintenance**

A. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B. The permittee shall provide an adequate operating staff which is duly qualified to carryout operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.

2. **Need to Halt or Reduce not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored or an alternative method of treatment is provided.

This requirement applies, for example, when the primary source of power for the treatment facility is reduced, is lost, or alternate power supply fails.

3. **Duty to Mitigate**

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment or the water receiving the discharge.

4. **Bypass of Treatment Facilities**

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility, as defined at 40 C.F.R. § 122.41(m)(1)(i).

A. Bypass not exceeding limitation

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.B.4.B and 4.C.

B. Notice

1. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
2. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III.D.6 (24-hour notice).

C. Prohibition of bypass

1. Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(c) The permittee submitted notices as required by Part III.B.4.B.

2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Part III.B.4.C(1).

5. **Upset Conditions**

A. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Part III.B.5.B of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

B. Conditions necessary for demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and that the permittee can identify the specific cause(s) of the upset.
2. The permitted facility was at the time being properly operated.
3. The permittee submitted notice of the upset as required by Part III.D.6.
4. The permittee complied with any remedial measures required by Part III.B.3.

C. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. **Removed Substances**

A. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State. The Permittee must comply with all applicable state and Federal regulations governing the disposal of sludge, including but not limited to 40 C.F.R. Parts 257, 258, and 503.

B. Any changes to the permittee's disposal practices described in the Fact Sheet, as derived from the permit application, will require at least 180 days prior notice to the Director to allow time for additional permitting. Please note that the 180 day notification requirement may be waived if additional permitting is not required for the change.

7. **Power Failure**

The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators, or retention of inadequately treated effluent.

SECTION C – MONITORING AND RECORDS

1. **Representative Sampling**

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before

the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director. Intermittent discharge shall be monitored.

2. **Flow Measurement**

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than +/- 10% from true discharge rates throughout the range of expected discharge volumes and shall be installed at the monitoring point of the discharge.

Calculated Flow Measurement

For calculated flow measurements that are performed in accordance with either the permit requirements or a Division approved method (i.e., as allowed in the *Other Specified Monitoring Requirements* condition under Part II), the +/- 10% accuracy requirement described above is waived. This waiver is only applicable when the method used for calculation of the flow has been reviewed and approved by the Division.

3. **Monitoring Procedures**

Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this permit. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals frequent enough to ensure accuracy of measurements and shall ensure that both calibration and maintenance activities will be conducted. An adequate analytical quality control program, including the analysis of sufficient standards, spikes, and duplicate samples to ensure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory. At a minimum, spikes and duplicate samples are to be analyzed on 10% of the samples.

4. **Penalties for Tampering**

The Arkansas Water and Air Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than ten thousand dollars ($10,000) or by both such fine and imprisonment.

5. **Reporting of Monitoring Results**

40 C.F.R. § 127.11(a)(1) and 40 C.F.R. § 127.16(a) require that monitoring reports must be reported on a Discharge Monitoring Reports (DMR) and filed electronically. Signatory

Authorities must initially request access for a NetDMR account. Once a NetDMR account is established, use the following link to access electronic filing: https://cdx.epa.gov. Permittees who are unable to file electronically may request a waiver from the Director in accordance with 40 C.F.R. § 127.15. Monitoring results obtained during the previous monitoring period shall be summarized and reported on a DMR dated and submitted no later than the 25th day of the month, following the completed reporting period beginning on the effective date of the permit.

6. **Additional Monitoring by the Permittee**

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 C.F.R. Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated on the DMR.

7. **Retention of Records**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

8. **Record Contents**

Records and monitoring information shall include:

A. The date, exact place, time, and methods of sampling or measurements, and preservatives used, if any.
B. The individual(s) who performed the sampling or measurements.
C. The date(s) and time analyses were performed.
D. The individual(s) who performed the analyses.
E. The analytical techniques or methods used.
F. The measurements and results of such analyses.
G. The chain of custody that records the sequence of custody, control, transfer, analysis, and measurement of the analyses.

9. **Inspection and Entry**

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
D. Sample, inspect, or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION D – REPORTING REQUIREMENTS

1. **Planned Changes**

The Permittee shall give notice to the Director as soon as possible but no later than 180 days prior to any planned physical alterations or additions to the permitted facility [40 C.F.R. § 122.41(l)]. Notice is required only when:

A. The alteration or addition to a permitted facility may meet one of the criteria for new sources at 40 C.F.R. § 122.29(b).
B. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to the notification requirements under 40 C.F.R. § 122.42(b).

2. **Anticipated Noncompliance**

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. **Transfers**

The permit is nontransferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. **Monitoring Reports**

Monitoring results shall be reported at the intervals and in the form specified in Part III.C.5. **Discharge Monitoring Reports must be submitted even when no discharge occurs during the reporting period.**

5. **Compliance Schedule**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the

cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. **Twenty-four Hour Report**

Please be aware that the notifications can be sent by email to EE.Water.Enforcement.Report@arkansas.gov or at 501-682-0624 for immediate reporting:

A. The permittee shall report any noncompliance which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances to the Enforcement Branch of the Office of Water Quality of DEQ. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain the following information:

1. A description of the noncompliance and its cause.
2. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue.
3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

B. The following must be reported within 24 hours:

1. Any unanticipated bypass which exceeds any effluent limitation in the permit.
2. Any upset which exceeds any effluent limitation in the permit.
3. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part I of the permit.

C. The Director may waive the written report on a case-by-case basis if the notification has been received within 24 hours by the Enforcement Branch of the Office of Water Quality of the DEQ.

7. **Other Noncompliance**

The permittee shall report all instances of noncompliance not reported under Parts III.D.4, 5, and 6, at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.6.

8. **Changes in Discharge of Toxic Substances for Industrial Dischargers including Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers**

The Director shall be notified as soon as the permittee knows or has reason to believe:

A. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant including those listed in 40 C.F.R. § 401.15 which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 C.F.R. § 122.42(a)(1).

B. That any activity has occurred or will occur which would result in any discharge on a non-routine or infrequent basis of a toxic pollutant including those listed in 40 C.F.R. § 401.15 which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 C.F.R. § 122.42(a)(2).

9. **Duty to Provide Information**

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit. Information shall be submitted in the form, manner and time frame requested by the Director.

10. **Duty to Reapply**

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The complete application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be implemented through procedures outlined by PC&EC Rule 6.

11. **Signatory Requirements**

All applications, reports, or information submitted to the Director shall be signed and certified as follows:

A. All **permit applications** shall be signed as follows:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.
(b) The manager of one or more manufacturing, production, or operation facilities, provided: the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign

documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. For a partnership or sole proprietorship: by a general partner or proprietor, respectively.

3. For a municipality, State, Federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

   (a) The chief executive officer of the agency.
   (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

B. All **reports** required by the permit and **other information** requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above.
2. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
3. The written authorization is submitted to the Director.

C. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. **Availability of Reports**

Except for data determined to be confidential under 40 C.F.R. Part 2 and PC&EC Rule 6, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division of Environmental Quality. As required by the Rules, the name and address of any permit applicant or permittee, permit applications, permits, and effluent data shall not be considered confidential.

13. **Penalties for Falsification of Reports**

The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part III.A.2 and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).

14. **Other Information**

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

PART IV
DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act and 40 C.F.R. § 122.2 shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. **"7-Day Average"** means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week, divided by the number of "daily discharges" measured during that week (also known as "average weekly"). The 7-Day Average for Fecal Coliform Bacteria (FCB), or *E. coli*, is the geometric mean of the "daily discharges" of all effluent samples collected during a calendar week in colonies, or most probable number (MPN) per 100 ml.
2. **"Act"** means the Clean Water Act, Public Law 95-217 (33.U.S.C. 1251 et seq.) as amended.
3. **"Administrator"** means the Administrator of the U.S. Environmental Protection Agency.
4. **"PC&EC"** means the Pollution Control and Ecology Commission.
5. **"Applicable standards and limitations"** means all State, interstate, and federal standards and limitations to which a "discharge," a "sewage sludge use or disposal practice," or a related activity is subject under the Act, including "effluent limitations," water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices," pretreatment standards, and "standards for sewage sludge use or disposal" under sections 301, 302, 303, 304, 306, 307, 308, 403, and 405 of the Act.
6. **"Applicable water quality standards"** means all water quality standards to which a discharge is subject under the Act and which has been (a) approved or permitted to remain in effect by the Administrator following submission to the Administrator pursuant to Section 303(a) of the Act, or (b) promulgated by the Director pursuant to Section 303(b) or 303(c) of the Act, and standards promulgated under (PC&EC) Rule 2, as amended.
7. **"Best Management Practices (BMPs)"** means activities, practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of waters of the State. BMPs also include treatment technologies, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may include structural devices or nonstructural practices.
8. **"Bypass"** means the intentional diversion of waste streams from any portion of a treatment facility, as defined at 40 C.F.R. § 122.41(m)(1)(i).
9. **"Composite sample"** means a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) during operational hours, within the 24-hour period, and combined proportional to flow or a sample collected at more frequent intervals proportional to flow over the 24-hour period.
10. **"CV"** means coefficient of variation.
11. **"Daily Discharge"** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.
    A. **Mass Calculations:** For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of pollutant discharged over the sampling day.

B. **Concentration Calculations:** For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

12. **"Daily Maximum"** discharge limitation means the highest allowable "daily discharge" during the calendar month.
13. **"Director"** means the Director of the Division of Environmental Quality.
14. **"Dissolved oxygen limit"** means
    A. when limited in the permit as a minimum monthly average, the lowest acceptable monthly average value, determined by averaging all samples taken during the calendar month; **OR**
    B. when limited in the permit as an instantaneous minimum value, that no value measured during the reporting period may fall below the stated value.
15. **"Division"** means the Division of Environmental Quality (**DEQ**).
16. **"E. coli"** means a sample that consists of one effluent grab portion collected during a 24-hour period at peak loads. For *E. coli*, report the Daily Maximum as the highest "daily discharge" during the calendar month, 7-Day Average as the geometric mean of all "daily discharges" within a calendar week, and the Monthly Average as the geometric mean of all "daily discharges" within a calendar month, in colonies or MPN per 100 ml.
17. **"Fecal Coliform Bacteria (FCB)"** means a sample that consists of one effluent grab portion collected during a 24-hour period at peak loads. For FCB, report the Daily Maximum as the highest "daily discharge" during the calendar month, 7-Day Average as the geometric mean of all "daily discharges" within a calendar week, and the Monthly Average as the geometric mean of all "daily discharges" within a calendar month, in colonies or MPN per 100 ml.
18. **"Grab sample"** means an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
19. **"Industrial User"** means a source of Indirect Discharge. Indirect Discharge means the introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c), or (d) of the Act.
20. **"Instantaneous flow measurement"** means the flow measured during the minimum time required for the flow-measuring device or method to produce a result in that instance. To the extent practical, instantaneous flow measurements coincide with the collection of any grab samples required for the same sampling period so that together the samples and flow are representative of the discharge during that sampling period.
21. **"Instantaneous Maximum"** (when limited in the permit as an instantaneous maximum value) means that no value measured during the reporting period may fall above the stated value.
22. **"Instantaneous Minimum"** (when limited in the permit as an instantaneous minimum value) means that no value measured during the reporting period may fall below the stated value.
23. **"Interference"** means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:
    A. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use, or disposal; and
    B. Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations, or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act (CWA), the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act

(RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

24. **"Monitoring and Reporting"**
    NPDES permits specify monitoring and reporting requirements for specific periods defined as follows:
    A. **"MONTHLY"** means a calendar month, or any portion of a calendar month, for monitoring requirement frequency of once/month or more frequently.
    B. **"BI-MONTHLY"** means two (2) calendar months or any portion of 2 calendar months for monitoring requirement frequency of once/2 months or more frequently.
    C. **"QUARTERLY"** means:
        1. a **fixed calendar quarter** (or any part of the fixed calendar quarter) for a non-seasonal effluent characteristic with a measurement frequency of once/quarter. Fixed calendar quarters are: January through March, April through June, July through September, and October through December; **OR**
        2. a **fixed three month period** (or any part of the fixed three month period) of, or dependent upon, the seasons specified in the permit for a seasonal effluent characteristic with a monitoring requirement frequency of once/quarter that does not coincide with the fixed calendar quarter. Seasonal calendar quarters are: May through July, August through October, November through January, and February through April.
    D. **"SEMI-ANNUAL"** means the fixed time periods January through June, and July through December (or any portion thereof) for an effluent characteristic with a measurement frequency of once/6 months.
    E. **"ANNUAL" or "YEARLY"** means a fixed calendar year, or any portion of the fixed calendar year, for an effluent characteristic or parameter with a measurement frequency of once/year. A calendar year is January through December, or any portion thereof.
25. **"Monthly Average"** means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month, divided by the number of "daily discharges" measured during that month. For Fecal Coliform Bacteria (FCB) or *E. coli*, report the Monthly Average as the geometric mean of all "daily discharges" within a calendar month.
26. **"National Pollutant Discharge Elimination System (NPDES)"** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under Sections 307, 402, 318, and 405 of the Act.
27. "**NOEC**" means No Observed Effect Concentration.
28. **"Pass Through"** means a discharge which exits the POTW in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
29. **"Percent Removal"** means a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the effluent pollutant concentrations for a given time period.
30. **"PMSD"** means Percent Minimum Significant Difference.
31. **"POTW"** means Publicly Owned Treatment Works, as defined in 40 C.F.R. § 403.3(q).

32. **"Severe property damage"** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in products.
33. **"Sewage sludge"** means any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 C.F.R. Part 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.
34. **"Treatment works"** means any devices and systems used in storage, treatment, recycling, and reclamation of municipal sewage and industrial wastes, of a liquid nature to implement section 201 of the Act, or necessary to recycle reuse water at the most economic cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities, and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment.
35. **Units of Measure:**
    A. **"cfs"** means cubic feet per second.
    B. **"MGD"** means million gallons per day.
    C. **"µg/l"** means micrograms per liter, or parts per billion (ppb).
    D. **"mg/l"** means milligrams per liter, or parts per million (ppm).
    E. **"ppb"** means parts per billion.
    F. **"ppm"** means parts per million.
    G. **"s.u."** means standard units.
    H. **"lb/d"** means pounds per day.
    I. **"col/100 ml"** means colonies per 100 milliliters, or most probable number (MPN) per 100 milliliters.
36. **"Upset"** means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. Any upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventive maintenance, or careless or improper operations.
37. **"Visible sheen"** means the presence of a film or sheen upon or a discoloration of the surface of the discharge. A sheen can also be from a thin glistening layer of oil on the surface of the discharge.
38. **"Week"** means a calendar week, consisting of the 7-day period of Sunday through Saturday.
39. **"Weekday"** means Monday – Friday.

Final Fact Sheet

This Fact Sheet is for information and justification of the permit requirements only. Please note that it is not enforceable. This permitting decision is for the renewal of discharge Permit Number AR0001210 with Arkansas Department of Energy and Environment – Division of Environmental Quality (DEQ) Arkansas Facility Identification Number (AFIN) 02-00013 to discharge to Waters of the State.

1. PERMITTING AUTHORITY

The issuing office is:

Division of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT

The applicant's mailing address is:

Georgia-Pacific Crossett LLC - Crossett Paper Operations
P.O. Box 3333
Crossett, AR 71635

The facility address is:

Georgia-Pacific Crossett LLC - Crossett Paper Operations
100 Mill Supply Road
Crossett, AR 71635

3. PREPARED BY

The permit was prepared by:

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4. PERMIT ACTIVITY

Previous Permit Effective Date:	November 1, 2010
Previous Permit Modification Date:	October 30, 2015
Previous Permit Expiration Date:	October 31, 2015

The permittee submitted a permit renewal application on May 4, 2015, with additional information received by May 27, 2015. The permittee submitted updates to the renewal application October 8, 2019, May 18, 2020, and April 6, 2023. The previous discharge permit is being reissued for a 5-year term in accordance with regulations promulgated at 40 C.F.R. § 122.46(a).

The permittee has requested that the following changes be made to the permit:

Request 1: Georgia-Pacific Crossett LLC (GP) discontinued operation of the pulp mill and the bleach plant in November 2019. The process equipment associated with internal Outfalls 101, 102, and 103 has been permanently shut down and is in the process of demolition. Therefore, the internal outfalls should be removed from the permit.

Response 1: The Office of Water Quality (OWQ) concurs. The internal outfalls will be removed from the permit.

Request 2: Adsorbable Organic Halogens (AOX) is currently monitored three times per week and 2,3,7,8-TCDD (dioxin) is monitored once per quarter at Outfall 001. Because the facility no longer operates a pulp mill or bleach plant, GP believes that the requirements in 40 C.F.R. Part 430 are no longer applicable. Since the shutdown in 2019, AOX results have averaged 21 lbs/day, less than 1% of the current permit limit of 2,146 lbs/day. There have also been no quantifiable detections of dioxin during the term of the current permit. GP no longer produces or uses Chlorine Dioxide or Chloride Dioxide containing substances in raw materials for their process or otherwise at their site, and it is not believed to be present in the current production processes. As such, GP requested that the AOX and dioxin monitoring be removed from the permit.

Response 2: The OWQ concurs. The AOX and the 2,3,7,8-TCDD requirements will be removed from the permit.

Request 3: The mill has historically maintained a Best Management Practices (BMP) Plan for Spent Pulping Liquor Management, Spill Prevention and Control as required by Part II.9 of the NPDES permit and based on the requirements in 40 C.F.R. Part 430. All operations and equipment covered by this plan have been decommissioned and demolished. Because the facility no longer operates a pulp mill or bleach plant, GP believes that the requirements in 40 C.F.R. Part 430 are no longer applicable. As such, GP requests that Part II.9 be removed from the permit.

Response 3: The OWQ concurs. The referenced BMP condition will be removed from the permit.

Request 4: Dieldrin limits were included in the last permit based on a single sampling detection data point in the last application. During the term of the current permit, GP has had no quantifiable detections for dieldrin. GP does not use dieldrin or dieldrin-containing substances in any raw materials for their process or otherwise at the site. GP requests that the dieldrin limits be removed from the permit.

Response 4: The OWQ concurs. The Dieldrin requirements will be removed from the permit.

Request 5: The monitoring frequency for BOD_5 and TSS in the current permit is three per week at Outfall 001 and SMS 002. The ratio of the long-term average permit limit has been less than 25%. Based on the EPA memorandum "Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies" dated April 19, 1996, GP is requesting a reduction of the BOD_5 and TSS sampling frequency to once per week.

Response 5: The OWQ concurs. See Item No. 15 of this Fact Sheet for additional information.

Request 6: The monitoring frequency for Copper and Zinc in the current permit is once per month at Outfall 001 and SMS 002. The ratio of the long-term average permit limit has been less than 25%. Based on the EPA memorandum "Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies" dated April 19, 1996, GP is requesting a reduction of the Copper and Zinc sampling frequency to once per 6 months.

Response 6: The OWQ concurs. See Item No. 15 of this Fact Sheet for additional information.

Request 7: The current permit requires monitoring of the change in the receiving stream color at a frequency of once per quarter. Since the decommissioning of the pulping operations, the mill's effluent color has decreased from approximately 250 PCU to 80 PCU. The material decrease in color combined with the reduced effluent volume has resulted in a visibly reduced color loading on the receiving stream. Accordingly, because the facility no longer operates a pulp mill, with the resulting minimization of color loading, GP is requesting the removal of the receiving stream color monitoring.

Response 7: The OWQ concurs. The requirement to remove the stream color testing will be removed from the permit.

Request 8: The critical dilution for WET testing listed in the current permit is 80%. GP is requesting a new evaluation of the critical dilution based on the reduced effluent flow of 12.5 MGD.

Response 8: The critical dilution and the dilution series for the WET testing will be recalculated using the reduced effluent flow rate. See Item No. 13 of this Fact Sheet for additional information.

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

PC&EC - Pollution Control and Ecology Commission
BAT - best available technology economically achievable
BCT - best conventional pollutant control technology
BMP - best management practice
BOD_5 - five-day biochemical oxygen demand
BPJ - best professional judgment

BPT - best practicable control technology currently available
CAR - Code of Arkansas Rules
$CBOD_5$ - carbonaceous biochemical oxygen demand
CD - critical dilution
C.F.R. - Code of Federal Regulations
cfs - cubic feet per second
COD - chemical oxygen demand
COE - United States Corp of Engineers
CPP - continuing planning process
CWA - Clean Water Act
DMR - discharge monitoring report
DO - dissolved oxygen
ELG - effluent limitation guidelines
EPA - United States Environmental Protection Agency
ESA - Endangered Species Act
FCB - fecal coliform bacteria
gpm - gallons per minute
MGD - million gallons per day
MMP – mercury minimization plan
MQL - minimum quantification level
NAICS - North American Industry Classification System
NH_3-N - ammonia nitrogen
$NO_3 + NO_2$-N - nitrate + nitrite nitrogen
NPDES - National Pollutant Discharge Elimination System
O&G - oil and grease
Rule 2 - PC&EC Rule 2, now codified in 8 CAR Part 21
Rule 6 - PC&EC Rule 6, now codified in 8 CAR Part 25
Rule 8 - PC&EC Rule 8, now codified in 8 CAR Part 11
Rule 9 - PC&EC Rule 9, now codified in 8 CAR Part 12
RP - reasonable potential
SIC - standard industrial classification
TDS - total dissolved solids
TMDL - total maximum daily load
TP - total phosphorus
TRC - total residual chlorine
TSS - total suspended solids
UAA - use attainability analysis
USF&WS - United States Fish and Wildlife Service
USGS - United States Geological Survey
WET - whole effluent toxicity
WQMP - water quality management plan
WQS - Water Quality standards
WWTP - wastewater treatment plant

Compliance and Enforcement History:

The compliance and enforcement history for this facility can be reviewed by using the following web link:

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_Updated%20Enforcement%20Review_20241029.pdf

5. SIGNIFICANT CHANGES FROM THE PREVIOUSLY ISSUED PERMIT

The permittee is responsible for carefully reading the permit in detail and becoming familiar with all of the changes therein:

1. Cover Page
   a. The types of wastewater allowed to be discharged under this permit have been listed on the cover page.
   b. The driving directions have been removed.
   c. The mailing address has been removed.
2. Outfall 001
   a. The pulp mill, bleach plant, plywood plant, and studmill operations have been removed.
   b. The decimal places for the BOD_5 concentrations have been removed based on the OWQ's rounding policy.
   c. Mass limits have changed based on the revised operations and lower flow.
   d. The BOD_5, TSS, Total Recoverable Copper, and Total Recoverable Zinc monitoring frequencies have been reduced. See Item No. 15 of this Fact Sheet for additional information.
   e. The WET requirements and monitoring frequency have changed. See Item No. 13 of this Statement of Basis for additional information.
   f. Dioxin, AOX, and dieldrin have been removed from the permit. See Item No. 4 of this Statement of Basis for additional information.
   g. Pathogen indicator requirements have been added to the permit. See Item No. 11.A of this Fact Sheet for additional information. Tier I and Tier II limits along with a transition condition in Part II.16 have been added to allow the facility to change from FCB monitoring to *E. coli* monitoring if Rule 2 criteria are revised.
   h. The footnote concerning discharge of distinctly visible solids, scum, etc. has been revised to the OWQ's current language.
   i. The monitoring frequency for TP and NO_3-N was reduced to once/year when the facility is not adding a nutrient blend to the treatment system. See Items No. 11.A and 15 of this Fact Sheet for additional information.
3. SMS002
   a. SMS002 has been changed back to Outfall 002. This change is necessary to comply with the Clean Water Act because, in accordance with the definition of Water of the United States, 40 C.F.R. 120.2, the wastewater treatment system exclusion applies to the treatment pond Mossy Lake. See EPA's 1986 and 1991 permits for this facility.
   b. Dieldrin and the requirement to monitor the change in color in the Ouachita River have been removed. See Item No. 4 of this Fact Sheet for additional information.
   c. The footnote concerning discharge of distinctly visible solids, scum, etc. has been revised to the OWQ's current language.

4. The internal outfalls have been removed. See Item No. 4 of this Fact Sheet for additional information.
5. Part II
   a. Conditions related to the removal of the bleach plant and pulp mill have been removed. (Condition Nos. 6, 7, 8, 9, 11, and 13 in the previous permit.)
   b. Dieldrin requirements have been removed.
   c. WET language has been revised, including the critical dilution and dilution series.
   d. Stream color monitoring requirements have been removed.
   e. Monitoring frequency condition has been removed.
   f. Chemical usage limits have been removed. The permittee is no longer using hydrogen peroxide and an organic iron catalyst for odor control due to operational changes at the facility.
   g. Cooling water intake structure requirements were added. See Item No. 12 of this Fact Sheet for additional information.
   h. The BMP condition (Part II.16 in previous permit) has been slightly modified.
   i. A condition concerning the use of outside laboratory testing has been added to the permit.
   j. Part II.15 was updated to clarify that it is applicable to the Saline River Canal intake structure.
6. Parts III and IV have been revised.

6. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION

The outfalls are located at the following coordinates based on the previous permit and confirmed with Google Earth using WGS84:

The outfalls are located at the following coordinates:

Outfall 001:	Latitude : 33° 06' 22.55" N;	Longitude: 92° 02' 17.2" W
Outfall 002:	Latitude : 33° 01' 58" N;	Longitude: 92° 04' 25" W

The outfalls discharge as follows:

Outfall 001: through a man-made channel to the upper reaches of the treatment pond Mossy Lake, then into Coffee Creek, then into the Ouachita River in Segment 2D of the Ouachita River Basin.
Outfall 002, when the gauge at the Felsenthal Lock and Dam is below 62 feet: from the outfall structure for the treatment pond Mossy Lake to Coffee Creek then into the Ouachita River in Segment 2D of the Ouachita River Basin.
Outfall 002, when the gauge at the Felsenthal Lock and Dam is at or exceeds 62 feet: the outfall structure for Outfall 002 is inundated by the Ouachita River in Segment 2D of the Ouachita River Basin.

The receiving stream (Ouachita River) with Assessment Unit AR_08040202_001 is a Water of the State classified for primary and secondary contact recreation, raw water source for

domestic (public and private), industrial, and agricultural water supplies; propagation of desirable species of fish and other aquatic life; and other compatible uses.

7. 303(d) LIST, TOTAL MAXIMUM DAILY LOADS, ENDANGERED SPECIES, AND ANTI-DEGRADATION CONSIDERATIONS

A. 303(d) List

The receiving stream is not listed on the 2022 303(d) list in Arkansas. Therefore, no additional action is necessary at this time.

The Ouachita River (from the Arkansas state line to the Columbia Lock and Dam), subsegment number LA080101_00 is on Louisiana's 2022 303(d) list for color due to natural sources. No action is being taken regarding this listing due to the material and substantial changes which have occurred at this facility and also due to the cause of the impairment.

B. Applicable Total Maximum Daily Load (TMDL) Reports

The permittee is listed in Table A.1 of *TMDLs for Segments Listed for Mercury in Fish Tissue for the Ouachita River Basin, and Bayou Bartholomew, Arkansas and Louisiana to Columbia*. As a result, the permit includes requirements for a Mercury Minimization Plan (MMP) which is continued from the previous permit. A copy of the TMDL may be found using the following link:

https://www.adeq.state.ar.us/downloads/WebDatabases/Water/TMDL/pdfs/Ouachita_and_Bayou_Bartholomew_Hg_2002_12_18_Final.pdf

C. Endangered Species

No comments on the application were received from the USF&WS. The permit and Fact Sheet were sent to the USF&WS for their review.

The Arkansas Natural Heritage Commission has identified that the following species of conservation concern are known to occur in the Ouachita River at the mouth of Coffee Creek just downstream of Outfall 002:

Atractosteus spatula, Alligator Gar-state concern

The limits in the permit are designed to protect all beneficial uses of the receiving waters, including propagation of desirable species of fish and other aquatic life as well as other species which are directly or indirectly affected by the receiving waters, which includes the above species of concern. Therefore, DEQ has determined that the final permit limits will serve to help protect the species of concern identified above.

D. **Anti-Degradation**

The limitations and requirements set forth in this permit for discharge into waters of the State are consistent with the Anti-degradation Policy and all other applicable water quality standards found in PC&EC Rule 2.

8. **OUTFALL, TREATMENT PROCESS DESCRIPTION, AND FACILITY CONSTRUCTION**

The following is a description of the facility described in the application:

A. Average Flow: Outfall 001 - 9.9 MGD

B. Type of Treatment: screening followed by primary clarifier, settling for ash removal, equalization, aerated lagoon with solids settling, sludge dewatering, chemical addition (hydrogen peroxide and iron catalyst) for odor control at the P2 sewer, the Chemical Plant, and after screening prior to the primary clarifier, and chemical addition of Iron salts at the aerated lagoon for reduction of sub-lethal activity. Nutrients may be added prior to the aerated lagoon as needed. Carbon dioxide (pH adjustment) and defoamer are added at Outfall 001 and Outfall 002. The permittee may move the points at which the chemicals may be added without modifying the permit if Division approval is received.

C. Discharge Description: process wastewater [Paper Mill (tissue machines, utilities area, and product stewardship waters), Bakelite (thermosetting resins including urea formaldehyde resin, phenol formaldehyde resin, urea formaldehyde concentrate, and spray dried resins), and Ingevity Chemical Plant (rosin based derivatives, tall oil fractionation, sizing agents, and derivatives)], sanitary wastewater (from the Paper Mill and the City of Crossett), landfill leachate, and site stormwater

D. Facility Status: This facility was evaluated using the NPDES Permit Rating Worksheet (MRAT) to determine the correct permitting status. Since the facility's MRAT score of 95 is greater than 80, this facility is classified as a major industrial.

E. Facility Construction: This permit does not authorize or approve the construction or modification of any part of the treatment system or facilities. Approval for such construction must be by permit issued under Rule 6.202.

9. **ACTIVITY**

Under the Standard Industrial Classification (SIC) code of 2621 or North American Industry Classification System (NAICS) code of 322121, the applicant's activities are the operation of a paper mill.

10. **SEWAGE SLUDGE AND SOLIDS PRACTICES**

Solids and sludge may be beneficially reused if approved by the Office of Land Resources. Alternatively, solids may be disposed of in an appropriate offsite landfill.

11. DEVELOPMENT AND BASIS FOR PERMIT CONDITIONS

The Division of Environmental Quality has determined to issue a permit for the discharge described in the application. Permit requirements are based on federal regulations (40 C.F.R. Parts 122, 124, and Subchapter N) and rules promulgated pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.). All of the information contained in the application, including all of the submitted effluent testing data, was reviewed to determine the need for effluent limits and other permit requirements.

The following is an explanation of the derivation of the conditions of the permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons suggesting the decisions as required under 40 C.F.R. § 124.7.

Technology-Based Versus Water Quality-Based Effluent Limitations and Conditions

Following regulations promulgated at 40 C.F.R. § 122.44, the permit limits are based on either technology-based effluent limits pursuant to 40 C.F.R. § 122.44(a) or on State water quality standards and requirements pursuant to 40 C.F.R. § 122.44(d), whichever are more stringent as follows:

Parameter	Water Quality-Based		Technology-Based		Previous Permit		Final Permit	
	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l
OUTFALL 001								
BOD_5 Concentration Mass (lbs/day)	 N/A N/A	 N/A N/A	 105 8669	 192 15853	 64.4 24155.4	 123.8 46453.0	 105 8669	 192 15853
TSS Concentration Mass (lbs/day)	 N/A N/A	 N/A N/A	 88.3 7291	 179 14779	 119.6 37720	 222.4 70188	 88.3 7291	 179 14779
Total Recoverable Copper	18.75 µg/l	37.62 µg/l	N/A	N/A	18.75 µg/l	37.62 µg/l	18.75 µg/l	37.62 µg/l
Total Recoverable Zinc	194.58 µg/l	390.41 µg/l	N/A	N/A	194.58 µg/l	390.41 µg/l	194.58 µg/l	390.41 µg/l
Total Phosphorous	N/A	N/A	Report	Report	Report	Report	Report	Report
Nitrates as Nitrogen	N/A	N/A	Report	Report	Report	Report	Report	Report
FCB[1]								
May – September	200	400	N/A	N/A	N/A	N/A	200	400
October – April	1000	2000	N/A	N/A	N/A	N/A	1000	2000
E. coli[1]								

Parameter	Water Quality-Based		Technology-Based		Previous Permit		Final Permit	
	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l
May – September	126	410	N/A	N/A	N/A	N/A	126	410
October – April	630	2050	N/A	N/A	N/A	N/A	630	2050
pH	6.0 – 9.0 s.u.		5.0 – 9.0 s.u.		6.0 – 9.0 s.u.		6.0 – 9.0 s.u.	
Outfall 002								
BOD_5, lb/day								
October – July	8000	12000	N/A	N/A	8000	12000	8000	12000
August	7262	10893	N/A	N/A	7262	10893	7262	10893
September	5911	8867	N/A	N/A	5911	8867	5911	8867
TSS, lb/day	18000	30000	N/A	N/A	18000	30000	18000	30000
Total Recoverable Copper	18.75 µg/l	37.62 µg/l	N/A	N/A	18.75 µg/l	37.62 µg/l	18.75 µg/l	37.62 µg/l
Total Recoverable Zinc	194.58 µg/l	390.41 µg/l	N/A	N/A	194.58 µg/l	390.41 µg/l	194.58 µg/l	390.41 µg/l
Total Phosphorous	N/A	N/A	Report	Report	Report	Report	Report	Report
Nitrates as Nitrogen	N/A	N/A	Report	Report	Report	Report	Report	Report
pH	6.0 – 9.0 s.u.		N/A		6.0 – 9.0 s.u.		6.0 – 9.0 s.u.	

[1] FCB limits/monitoring and reporting requirements are in effect until FCB is removed from Rule 2 (8 CAR Part 21). At that time, the *E. coli* limits/monitoring and reporting requirements will become effective. The permittee is not required to monitor *E. coli* until FCB is removed from the regulation.

A. **Justification for Limitations and Conditions of the Final Permit**

Parameter	Water Quality or Technology	Justification
Outfall 001		
BOD_5	Technology	40 C.F.R. Part 430, Subpart L, 40 C.F.R. Part 414, Subparts D, F, and H, 40 C.F.R. Part 454, Subparts E and F, 40 C.F.R. § 122.44(l), and previous permit
TSS	Technology	40 C.F.R. Part 430, Subpart L, 40 C.F.R. Part 414, Subparts D, F, and H, 40 C.F.R. Part 454, Subparts E and F, 40 C.F.R. § 122.44(l), and previous permit
Total Rec. Copper	Water Quality	Rule 2.508, CWA § 402(o), and previous permit
Total Rec. Zinc	Water Quality	Rule 2.508, CWA § 402(o), and previous permit

Parameter	Water Quality or Technology	Justification
Total Phosphorous	Technology	Judgment of permit writer, 40 C.F.R. § 122.44(l), and previous permit
Nitrates as Nitrogen	Technology	Judgment of permit writer, 40 C.F.R. § 122.44(l), and previous permit
FCB/*E. coli*	Water Quality	Rule 2.507
pH	Water Quality	Rule 2.504, CWA § 402(o), and previous permit
Outfall 002		
BOD_5	Water Quality	TMDL/WLA report approved by EPA on January 11, 2002
TSS	Water Quality	TMDL/WLA report approved by EPA on January 11, 2002
Total Rec. Copper	Water Quality	Rule 2.508, CWA § 402(o), and previous permit
Total Rec. Zinc	Water Quality	Rule 2.508, CWA § 402(o), and previous permit
Total Phosphorous	Technology	Judgment of permit writer (see further explanation below this table.), 40 C.F.R. § 122.44(l), and previous permit
Nitrates as Nitrogen	Technology	Judgment of permit writer (see further explanation below this table.), 40 C.F.R. § 122.44(l), and previous permit
pH	Water Quality	Rule 2.504, CWA § 402(o), and previous permit

The BOD_5 and the TSS limits at Outfall 001 have changed based on different flows and the change in the manufacturing processes.

FCB/*E. coli* limits have been added to the permit at Outfall 001 based on sanitary wastewater composing a higher percentage of the overall effluent volume.

Monitoring and reporting requirements for Total Phosphorus and Nitrates as Nitrogen were added to the permit during the last renewal because the permittee has the option to add a nutrient solution just prior to the aerated lagoon to aid in biological activity. Additionally, the Nutrient Control Implementation Plan in the CPP requires nutrient monitoring from all major municipal facilities and all other major facilities with significant organic waste in process water. This facility receives approximately 1 million gallons per day of municipal wastewater from the City of Crossett, in addition to process wastewater from the paper mill and organic chemical production facilities. Therefore, it appears that this facility receives a significant amount of organic waste and continued nutrient monitoring is required even if the nutrient solution is not being added. Nitrites have not been included in the requirements because the SDS of the nutrient mix does not indicate that nitrites are present, and any nitrites created by biological activity are expected to be rapidly oxidized to nitrates in the aerobic conditions of the treatment system. Numerical limits have not been included in the permit because water quality standards do not apply at Outfall 001 and the effluent passing through Outfall 002 enters the Ouachita River downstream of the Felsenthal National Wildlife Refuge via a half-mile stretch of Coffee Creek. Based on the reported concentrations of 0.59 mg/l Total Phosphorus (highest daily maximum reported in January 2022) and 3.7 mg/l Nitrates as Nitrogen (highest daily maximum reported in November 2021) at Outfall 001, no additional permit action is required regarding these parameters at

this time.

B. **Anti-backsliding**

The permit is consistent with the requirements to meet Anti-backsliding provisions of the Clean Water Act (CWA), Section 402(o) [40 C.F.R. § 122.44(l)]. The final effluent limitations for reissuance permits must be as stringent as those in the previous permit, unless the less stringent limitations can be justified using exceptions listed in CWA § 402(o)(2), CWA § 303(d)(4), or 40 C.F.R. § 122.44(l)(2)(i).

The internal outfalls have been removed due to the facility discontinuing the pulp mill and the bleach plant operations at this facility. These changes do not violate the anti-backsliding standards of 40 C.F.R. § 122.44(l) since they were made due to material and substantial changes at the facility.

Dieldrin limits have been removed from the permit. This parameter was added in the previous renewal because there was one sample that caused the permittee to demonstrate reasonable potential. This parameter has not been detected in any other samples. This change does not violate the anti-backsliding standards of CWA § 402(o) since it is based on new information.

C. **Limits Calculations**

1. Mass Limits:

   In accordance with 40 C.F.R. § 122.45(f)(1), all pollutants limited in permits shall have limitations expressed in terms of mass if feasible. 40 C.F.R. § 122.45(f)(2) allows for pollutants which are limited in terms of mass to also be limited in terms of other units of measurement.

   The calculation of the concentrations (mg/l) uses an average flow of 9.9 MGD and the following equation:

   Concentration (mg/l) = Mass (lbs/day)/(Flow (MGD) × 8.34)

2. Daily Maximum Limits:

   Outfall 001

   The daily maximum limits for BOD_5 and TSS are based on the applicable ELGs.

   The daily maximum limits for Copper and Zinc are based on the procedures set forth in Appendix D of the CPP.

   Outfall 002

   The daily maximum limits for BOD_5 and TSS are based on Section 5.4.2 of the Technical Support Document for Water Quality-based Toxics Control:

daily maximum limits = monthly average limits × 1.5

The daily maximum limits for Copper and Zinc are based on the procedures set forth in Appendix D of the CPP.

D. **208 Plan (Water Quality Management Plan)**

The 208 Plan, developed by the DEQ under provisions of Section 208 of the federal Clean Water Act, is a comprehensive program to work toward achieving federal water goals in Arkansas. The initial 208 Plan, adopted in 1979, provides for annual updates, but can be revised more often if necessary.

There are no 208 Plan updates occurring with this permit renewal.

E. **Applicable Effluent Limitations Guidelines**

The requirements of 40 C.F.R. Part 437 – The Centralized Waste Treatment (CWT) Point Source Category are not applicable to this permit since the CWT wastewater is received from off-site via conduit from the facility that generates the wastes. (40 C.F.R. § 437.1(b)(3))

40 C.F.R. Part 414, Subpart J – Direct Discharge Point Sources and Subpart K – Indirect Discharge Point Sources

Per page II-2 of *Development Document for Effluent Limitations Guidelines and Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category, Volume 1*, the types of dischargers are direct, indirect, and zero or alternative dischargers.

Direct dischargers are defined as plants that produce a contaminated process wastewater that is discharged directly into a surface water. Indirect dischargers are defined as those who send the wastewater to a POTW. Zero or alternative disposal/dischargers are plants that discharge no OCPSF process wastewater to surface streams or to POTWs. For the purposes of this report, these include plants that use some kind of alternative disposal technology.

Per page III-41 of the above-referenced development document, discharge of process wastewaters into the system of an adjoining manufacturing facility or to a treatment system not owned by a government entity is not considered an indirect discharge, but is termed off-site disposal and is considered an alternative disposal method.

Therefore, this facility is considered an alternative discharger and is subject to neither the Subpart J nor Subpart K requirements. No priority organics were detected in the priority pollutant scan at Outfall 001, so there is no reasonable potential for the alternative discharge to cause or contribute to an exceedance of water quality criteria for priority organics.

40 C.F.R. Part 403 – General Pretreatment Regulations for Existing and New Sources of Pollution

As defined in 40 C.F.R. § 403.3(i), "The term *Indirect Discharge* or *Discharger* means the introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c) or (d) of the Act."

40 C.F.R. § 403.3(q) defines POTW as "a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works."

The permittee does not meet the definition of POTW so the facility generating the wastewater does not meet the definition of Indirect Discharge. Therefore, the requirements of 40 C.F.R. Part 403 are not applicable to this facility.

Other

The applicable ELGs are indicated with the specified waste streams and are listed on the technical limits calculations on the following document:

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_Updated%20Technology%20Calculations_20240422.pdf

F. **Priority Pollutant Scan (PPS)**

As stated on page A-31 of Rule 2, Chapter 5 of Rule 2 does not apply to the treatment pond Mossy Lake and Coffee Creek. Therefore, toxics limits based on levels in the effluent at Outfall 001 have not been calculated.

Reasonable potential calculations for exceedances of the water quality criteria based on the conditions of the Ouachita River have been performed.

Outfall 002 is a discharge point approximately 2.5 miles upstream of the Arkansas/Louisiana state line. The methods for calculating the background flows based upon the 7Q10, TSS, hardness, etc. are based upon the Division's CPP and LDEQ's requirements in Title 33, Part IX, Subpart 1 and "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3." All data submitted was evaluated using both the Division's and LDEQ's methods.

DEQ has reviewed and evaluated the effluent in accordance with the potential toxicity of each analyzed pollutant using the procedures outlined in the Continuing Planning Process

(CPP). The effluent has also been reviewed and evaluated in accordance with the LDEQ procedures outlined in Title 33, Part IX, Subpart 1 and Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3, October 26, 2010 – Version 8.

The concentration of each pollutant after mixing with the receiving stream was compared to the applicable water quality standards as established in the Arkansas Water Quality Standards (AWQS), Rule 2 (Rule 2.508) and criteria obtained from the "Quality Criteria for Water, 1986 (Gold Book)."

Under federal regulation 40 C.F.R. § 122.44(d), as adopted by Rule 6, if a discharge poses the reasonable potential to cause or contribute to an exceedance above a water quality standard, the permit must contain an effluent limitation for that pollutant. Effluent limitations for the toxicants listed below have been derived in a manner consistent with the Technical Support Document (TSD) for Water Quality-based Toxics Control (EPA, March 1991), the CPP, and 40 C.F.R. § 122.45(c).

The following items were used in calculations:

Parameter	Value	Source
Discharge Flow = Q	9.9 MGD = 15.35 cfs	Application
7Q10 Background Flow	802 cfs	U.S.G.S.
Total Rec. Arsenic Background Conc.	0.59	OUA0008B, Jan. 2021 – June 2023
Total Rec. Copper Background Conc.	1.08	OUA0008B, Jan. 2021 – June 2023
Total Rec. Nickel Background Conc.	1.19	OUA0008B, Jan. 2021 – June 2023
Total Rec. Zinc Background Conc.	2.77	OUA0008B, Jan. 2021 – June 2023
Arkansas Calculations		
LTA Background Flow	2406 cfs	TSD for WQ-based Toxics Control, p. 88
TSS	5.5 mg/l	CPP
Hardness as $CaCO_3$	28 mg/l	CPP
% 7Q10 Flow for Acute Criteria Calculations	6% (48.12 cfs)	CPP (Appendix D.IV.A) and 7Q10 listed above
% 7Q10 Flow for Chronic Criteria Calculations	25% (200.5 cfs)	CPP (Appendix D.IV.A) and 7Q10 listed above
Louisiana Calculations		
TSS	8 mg/l	LDEQ e-mail
Hardness as $CaCO_3$	36.4 mg/l	LDEQ e-mail

Parameter	Value	Source
Flow Used to Determine RP for Noncarcinogenic Pollutants	7Q10 = 802 cfs	Title 33, Part IX, Subpart 1, Section 1113, Table 2B
% 7Q10 Flow for Acute Criteria Calculations	3.3% (26.47 cfs)	Title 33, Part IX, Subpart 1, Section 1113, Table 2A and 7Q10 listed above
% 7Q10 Flow for Chronic Criteria Calculations	33% (264.66 cfs)	Title 33, Part IX, Subpart 1, Section 1113, Table 2A and 7Q10 listed above

The following pollutants were reported above detection levels:

Pollutant	Concentration Reported, µg/l	Arkansas MQL, µg/l	LDEQ MQL, µg/l
Total Rec. Arsenic	0.9[1]	0.5	5
Total Rec. Copper	8.3[2]	0.5	3
Total Rec. Mercury	0.00136[1]	0.005	0.005
Total Rec. Nickel	1.8[1]	0.5	5
Total Rec. Zinc	39[3]	20	20
Total Phenols	5	5	5

[1] Single data point from PPS/EPA Form 2C from application.
[2] Maximum of 25 data points from DMRs from 2021 – 2022.
[3] Maximum of 104 data points from DMRs from 2021 - 2022.

Instream Waste Concentrations (IWCs) were calculated in the manner described in Appendix D of the CPP and compared to the applicable Criteria. The following tables summarize the results of the analysis. The complete evaluation can be viewed on the Division's website at the following address:

Background Metals Data

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_Background%20Metals%20Data_20240226.pdf

Louisiana

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_LA%20PPS%20at%209pt9%20MGD_20241009.pdf

Arkansas

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_AR%20PPS%20at%209pt9%20MGD_20241009.pdf

1. **Aquatic Toxicity Evaluation**

a. Acute Criteria Evaluation

Pollutant	Concentration Reported (C_e) µg/l	$C_e \times 2.13$[1]	Instream Waste Concentration (IWC)	Criteria[2]	Reasonable Potential (Yes/No)
			Acute, µg/l	Acute, µg/l	
Arkansas Calculations					
Total Rec. Copper	8.3	N/A[3]	2.82	13.44	No
Total Rec. Mercury	0.00136	0.0029	0.00070	6.70	No
Total Rec. Nickel	1.8	3.834	1.83	973.88	No
Total Rec. Zinc	39	N/A[3]	11.52	120.05	No
Louisiana Calculations					
Total Rec. Arsenic	0.9	1.917	1.077	625.8	No
Total Rec. Copper	8.3	N/A[3]	3.730	19.8	No
Total Rec. Mercury	0.00136	0.0029	0.001065	6.5	No
Total Rec. Nickel	1.8	3.834	2.161	1232.2	No
Total Rec. Zinc	39	N/A[3]	16.069	162.0	No
Total Phenols	5	10.65	3.909	700	No

[1] Statistical ratio used to estimate the 95th percentile using a single effluent concentration or the geometric mean of a dataset.
[2] Criteria are from Rule 2.508 unless otherwise specified.
[3] Over 20 data were reported. Therefore statistical ratio is not used.

b. Chronic Criteria Evaluation

Pollutant	Concentration Reported (C_e) µg/l	$C_e \times 2.13$[1]	Instream Waste Concentration (IWC)	Criteria[2]	Reasonable Potential (Yes/No)
			Chronic, µg/l	Chronic, µg/l	
Arkansas Calculations					
Total Rec. Copper	8.3	N/A[3]	1.59	10.02	No
Total Rec. Mercury	0.00136	0.0029	0.00021	0.012	No
Total Rec. Nickel	1.8	3.834	1.38	108.16	No
Total Rec. Zinc	39	N/A[3]	5.34	109.63	No
Louisiana Calculations					
Total Rec. Arsenic	0.9	1.917	0.663	176.2	No

Pollutant	Concentration Reported (C_e) µg/l	$C_e \times 2.13$[1]	Instream Waste Concentration (IWC)	Criteria[2]	Reasonable Potential (Yes/No)
			Chronic, µg/l	Chronic, µg/l	
Total Rec. Copper	8.3	N/A[3]	1.476	14.4	No
Total Rec. Mercury	0.00136	0.0029	0.000159	0.038	No
Total Rec. Nickel	1.8	3.834	1.335	147.0	No
Total Rec. Zinc	39	N/A[3]	4.756	147.9	No
Total Phenols	5	10.65	0.584	350	No

[1] Statistical ratio used to estimate the 95th percentile using a single effluent concentration or the geometric mean of a dataset.
[2] Criteria are from Rule 2.508 unless otherwise specified.
[3] Over 20 data were reported. Therefore statistical ratio is not used.

2. **Human Health (Bioaccumulation) Evaluation**

Pollutant	Concentration Reported (C_e) µg/l	$C_e \times 2.13$[1]	Instream Waste Concentration (IWC)	Criteria[2]	Reasonable Potential (Yes/No)
Arkansas Calculations					
Total Rec. Arsenic	0.9	1.917	0.60	1.4[3]	No
Total Phenols	5	10.65	0.07	N/A	N/A
Louisiana Calculations					
Total Rec. Arsenic[7]	0.9	1.917	0.615	10[6]	No
Total Rec. Mercury[7]	0.00136	0.0029	0.0000545	2.0[6]	No
Total Phenols[7]	5	10.65	0.200	5[5]	No

[1] Statistical ratio used to estimate the 95th percentile using a single effluent concentration or the geometric mean of a dataset.
[2] Criteria are from Rule 2.508 unless otherwise specified.
[3] Adapted from "National Recommended Water Quality Criteria: 2002 – Human Health Criteria Calculation Matrix," EPA. The respective WQC from the noted reference are Consumption of Organism Only values. The values from the reference are for a lifetime risk factor of 10^{-6}. These values have been multiplied by 10 to correspond with the human health criteria lifetime risk factor of 10^{-5} as stated in Rule 2.508.
[4] Reserved.
[5] Criteria from Title 33, Part IX, Subpart 1, Section 1113, Table 1.
[6] Criteria from Title 33, Part IX, Subpart 1, Section 1113, Table 1A.
[7] Classified as noncarcinogenic by *Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards Water Quality Management Plan Volume 3*, October 2010.

DEQ has determined from the submitted information that the discharge does not pose the reasonable potential to cause or contribute to an exceedance above a listed criteria. The limits for Total Recoverable Copper and Total Recoverable Zinc which were in the previous permit are being carried forth into the renewal permit.

The limits for Dieldrin have been removed from the permit. See Item No. 11.B of this Fact Sheet for additional information.

12. 316(B) REQUIREMENTS FOR COOLING WATER INTAKE STRUCTURES (CWIS)

EPA promulgated the Existing Facilities Rule pursuant to Clean Water Act Section 316(b) on August 15, 2014. The rule became effective on October 14, 2014. This Existing Facilities Rule is found in Subpart J of 40 C.F.R. Part 125 (125.90 through 125.99). Subpart J establishes the 316(b) requirements that apply to CWIS at existing facilities for the purpose of minimizing adverse environmental impact associated with the use of CWIS. The requirements are established and implemented in NPDES permits.

Subpart J is applicable to existing facilities that commenced construction on or before January 17, 2002. Since this facility commenced construction prior to that date, this facility is defined as an existing facility as defined in 40 C.F.R. § 125.92(k). Existing facilities are subject to all provisions of Subpart J if all of the following items are true:

(1) The facility is a point source;
(2) The facility uses or proposes to use one or more CWIS with a cumulative design intake flow of greater than 2 million gallons per day (MGD) to withdraw water from waters of the United States; and
(3) Twenty-five percent (25%) or more of the water the facility withdraws on an actual intake flow basis is used exclusively for cooling purposes.

This facility is a point source, and the design intake flow of the CWIS associated with this facility is 33 MGD. However, based on the CWIS information submitted by the facility dated February 12, 2021, this facility does <u>not</u> use 25% or more of the water withdrawn exclusively for cooling purposes. Therefore, this facility is <u>not</u> subject to requirements under 40 C.F.R. §§ 125.94 through 125.99 of Subpart J for existing facilities. Pursuant to 40 C.F.R. § 125.90(b), the facility must meet 316(b) requirements established by the permitting authority on a case-by-case, best professional judgement (BPJ) basis.

The CWIS at this facility consists of one 36-inch diameter intake pipe leading to two (2) fixed intake screens submerged in the Saline River Canal. Each screen is 9 feet high and 20.5 feet wide with a 60% screen open area. There are two (2) intake pumps with a rated capacity of 23,000 gallons per minute per pump. Only one of the pumps is operated at a time to resupply Lake GP. One intake pump operating at maximum pump capacity and at a low water elevation of 6.6 feet (minimum submerged screen height), results in a maximum through-screen design velocity of 1.438 fps as shown in calculation below:

$$\text{Through Screen Velocity} = \frac{23{,}000 \text{ gallons/minute}}{0.6 \times 9 \text{ feet} \times 6.6 \text{ feet} \times 60 \text{ seconds/minute} \times 7.48 \text{ gallons/feet}^3} = 1.438 \text{ fps}$$

Based on the above information, this permit establishes the following BPJ requirements to minimize any Adverse Environmental Impacts (AEI) from the cooling water intake structure (CWIS):

1. The permittee shall operate a CWIS with a maximum through-screen design velocity of 1.5 ft/sec.

2. The permittee shall maintain the intake screens in good working condition at all times.
3. The permittee shall maintain the open area of the intake screens by back-flushing the screens at a minimum frequency of twice per year, or more frequently if intake flow decreases due to leaf litter, silt, sticks, etc.
4. The permittee shall maintain records of the back-flushing events. These records shall include the date and duration of each back-flush event, and intake flow before and after each back-flush event. These records shall be kept on site and made available for inspection by DEQ personnel upon request.

13. WHOLE EFFLUENT TOXICITY

Section 101(a)(3) of the Clean Water Act states that "…it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited…." To ensure that the CWA's prohibitions for toxics are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants (49 FR 9016-9019, 3/9/84)." In support of the national policy, Region 6 adopted the "Policy for Post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992. In addition, DEQ is required under 40 C.F.R. § 122.44(d)(1), adopted by reference in PC&EC Rule 6, to include conditions as necessary to achieve water quality standards as established under Section 303 of the Clean Water Act.

The Regional policy and strategy are designed to ensure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State Water Quality Standard (WQS) resulting in non-conformance with the provisions of 40 C.F.R. § 122.44(d); (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

Whole effluent toxicity (WET) testing has been established for assessing and protecting against impacts upon water quality and designated uses caused by the aggregate toxic effect of the discharge of pollutants. The stipulated test species, which are appropriate to measure whole effluent toxicity, are consistent with the requirements of the State Water Quality Standards. The WET testing frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge, in accordance with the regulations promulgated at 40 C.F.R. § 122.48.

Implementation

Arkansas has established a narrative water quality standard under the authority of Section 303 of the CWA that states, "toxic materials shall not be present in receiving waters in such quantities as to be toxic to human, animal, plant or aquatic life or to interfere with the normal propagation, growth and survival of aquatic biota."

Whole effluent toxicity testing conducted by the permittee has shown potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or waterbody, at the appropriate instream critical dilution for *C. dubia*. Pursuant to 40 C.F.R. § 122.44(d)(1)(v), DEQ has determined from the permittee's self-reporting that the discharge from this facility

does have the reasonable potential to cause or contribute to an instream excursion above the narrative standard within the applicable State Water Quality Standards, in violation of Section 101(a)(3) of the Clean Water Act. Therefore, the permit must establish chronic effluent limitations following regulations promulgated by 40 C.F.R. § 122.44(d)(1)(v). These chronic effluent limitations (7-day NOEC) for *C. dubia* are applied at Outfall 001 beginning three years from the effective date of the permit. Prior to that date, the permit requires monitoring and reporting only with no limitations being established. For Outfall 001, the *C. dubia* 7-day NOEC value for chronic limits shall not be less than 7% (Critical Dilution). WET testing of the effluent is thereby required as a condition of this permit to assess potential toxicity. The WET testing procedures stipulated as a condition of this permit are as follows:

TOXICITY TESTS	**FREQUENCY**
Chronic WET	once/quarter

Requirements for measurement frequency are based on the CPP.

Although the 7Q10 is greater than 100 cfs (ft^3/sec), the dilution ratio (DR) is less than 100:1. Therefore, chronic WET testing requirements will be included in the permit.

The calculations for dilution used for chronic WET testing are as follows:

Critical dilution (CD) = (Qd/(Qd + Qb)) × 100

Qd = Average flow = 9.9 MGD = 15.35 cfs
7Q10 = 802 cfs
Qb = Background flow = (0.25) × 802 = 200.5 cfs
CD = (15.35) / (15.35 + 200.5) × 100 = 7%

DR = (7Q10 + Qd) / Qd = (802 + 15.35) / (15.35) = 53.25 < 100

Toxicity tests shall be performed in accordance with protocols described in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," EPA/600/4-91/002, July 1994. A minimum of five effluent dilutions in addition to an appropriate control (0%) are to be used in the toxicity tests. These additional effluent concentrations are 3%, 4%, 5%, 7%, and 9% (See the CPP). The low-flow effluent concentration (critical dilution) is defined as 7% effluent. The requirement for chronic WET tests is based on the magnitude of the facility's discharge with respect to receiving stream flow. The stipulated test species, *Ceriodaphnia dubia* and the Fathead minnow (*Pimephales promelas*), are representative of organisms indigenous to the geographic area of the facility; the use of these species is consistent with the requirements of the State water quality standards. The WET testing frequency has been established to provide data representative of the toxic potential of the facility's discharge, in accordance with the regulations promulgated at 40 C.F.R. § 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be reported according to EPA-

821-R-02-013, October 2002, and shall be submitted as an attachment to the Discharge Monitoring Report (DMR).

This permit may be reopened to require further WET testing studies, Toxicity Reduction Evaluation (TRE), and/or effluent limits if WET testing data submitted to the Division shows toxicity in the permittee's discharge. Modification or revocation of this permit is subject to the provisions of 40 C.F.R. § 122.62, as adopted by reference in PC&EC Rule 6. Increased or intensified toxicity testing may also be required in accordance with Section 308 of the Clean Water Act and Section 8-4-201 of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

Administrative Records

The following information summarizes toxicity tests submitted by the permittee during the term of the current permit at Outfall 001.

Permit Number:	AR0001210	AFIN:	02-00013	Outfall Number:	001
Date of Review:	10/16/2024	Reviewer:	N. McKenna/M. Barnett		
Facility Name:	Georgia-Pacific Crossett LLC				
Previous Dilution series:	25, 34, 45, 60, 80%	Proposed Dilution Series:	3, 4, 5, 7, 9%		
Previous Critical Dilution:	60%	Proposed Critical Dilution:	7%		
Previous TRE activities:	TRE initiated Jan 2022; final report May 2024				
Frequency recommendation by species					
Pimephales promelas (Fathead minnow):		once per quarter			
Ceriodaphnia dubia (water flea):		once per quarter			

TEST DATA SUMMARY

	Vertebrate		Invertebrate		
TEST DATE	Lethal	Sub-Lethal	Lethal	Sub-Lethal	
	NOEC	NOEC	NOEC	NOEC	
9/30/2019	80	80	80	60	
10/31/2019			80	80	Major process changes occured Oct 2019
11/30/2019	80	80	80	80	
12/31/2019			80	80	
2/29/2020	80	80	80	80	
4/30/2020	80	80	80	80	
6/30/2020	80	80	80	80	
8/31/2020	80	80	80	80	
10/31/2020	80	80	80	80	
12/31/2020	80	80	80	80	
2/28/2021	80	80	80	80	
4/30/2021	80	80	80	80	
6/30/2021	80	80	80	80	Stabilization post-changes verified May 2021
8/31/2021	80	80	80	80	
9/30/2021	80	80	80	**0**	
10/31/2021			80	80	Cd retest
11/30/2021	80	80	80	**45**	Cd retest
12/31/2021			80	**34**	Cd retest
1/31/2022	80	80	80	80	TRE initiated Jan 2022
2/28/2022			80	80	
3/30/2022	80	80	80	80	
4/30/2022			80	80	
5/30/2022	80	80	80	80	
6/30/2022			80	**25**	
7/31/2022	80	80	80	**32**	Cd retest
8/31/2022			80	60	Cd retest
9/30/2022			80	80	
10/31/2022	80	80	80	80	
11/30/2022	80	80	80	80	
12/31/2022			80	80	
1/31/2023	80	80	80	80	
2/28/2023			80	80	
3/30/2023	80	80	80	80	
4/30/2023			80	80	
6/30/2023	80	80	80	**0**	
6/30/2023			80	80	
8/31/2023	80	80	80	80	TIE
8/31/2023			80	80	
10/31/2023	80	80	80	80	TIE
10/31/2023			80	80	
12/31/2023	80	80	80	80	
12/31/2023	80	80	80	80	

2/29/2024	80	80	80	80	
3/30/2024	80	80	80	80	
4/30/2024			80	80	
6/30/2024	80	80	80	80	
8/31/2024	80	80	80	80	
Failures noted in BOLD					
REASONABLE POTENTIAL CALCULATIONS					
	Vertebrate Lethal	**Vertebrate Sub-lethal**	**Invertebrate Lethal**	**Invertebrate Sub-Lethal**	
Min NOEC Observed	80	80	80	12	
TU at Min Observed	1.25	1.25	1.25	8.33	
Count	19	19	33	33	
Failure Count	0	0	0	6	
Mean	1.250	1.250	1.250	1.913	
Std. Dev.	0.000	0.000	0.000	1.776	
CV	0	0	0	0.9	
RPMF	0	0	0	1.5	
Reasonable Potential	0.000	0.000	0.000	0.875	
100/Critical dilution	14.286	14.286	14.286	14.286	
Does Reasonable Potential Exist	No	No	No	No	
PERMIT ACTION					
P. promelas - chronic- monitoring *C. dubia* - chronic- monitoring					

Final TRE report states:

- "Toxicity seemed to only be observed during periods of significant algal blooms in the Aeration Stabilization Basin (ASB)."
- "Of note in this data review was the abundance of the filamentous cyanobacterium *Planktothrix* sp. At the time sub-lethal toxicity (impaired reproduction" to *Ceriodaphnia dubia* was detected in WET tests. It is hypothesized that the occurrence of *Planktothrix*, a microcystin producer (Pancracae et al. 2017), could have contributed to the observed toxicity…"
- "While the cause could not be determined conclusively, there is reason to believe that the source of toxicity may be related to naturally occurring processes."

A copy of the final TRE report can be found using the following link: https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_Final%20TRE%20Report_20130822.pdf

14. STORMWATER REQUIREMENTS

The federal regulations at 40 C.F.R. § 122.26(b)(14) require certain industrial sectors to have NPDES permit coverage for stormwater discharges from the facility. These requirements include the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) to control the quality of stormwater discharges from the facility. This facility was issued stormwater permit coverage under NPDES Tracking number ARR00A776.

15. SAMPLE TYPE AND FREQUENCY

The requirements for sample type and sampling frequency have been based on the current discharge permit.

The monitoring frequencies for BOD_5, TSS, Copper, and Zinc at Outfall 001 and Outfall 002 have decreased based on the compliance demonstrated in the last two years of data. See the following link for additional information:

Outfall 001

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_Monitoring%20Frequency%20Reduction%20Calculations_20240226.pdf

Outfall 002

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_SMS002%20Monitoring%20Frequency%20Reduction%20Worksheet_20240226.pdf

The sample type for Total Dissolved Iron has been set at the requirements for other metals at Outfall 001. The monitoring frequency has been set at once per month since this is a new parameter in the permit.

The sampling frequency for FCB at Outfall 001 have been set based on the requirements for other parameters already in the permit. The sample type has been set at grab since composite samples are not appropriate for this parameter.

Monitoring at Outfall 002 is not required when treatment pond Mossy Lake is flooded. As stated in Part IA of the permit, a flooded state is defined as the period when the gauge at the Felsenthal Lock and Dam exceeds 62 feet and also for the two weeks following the recession of flood waters below 62 feet. This condition has been continued from the previous permit because the permittee cannot obtain representative samples of the waters leaving treatment pond Mossy Lake when it is considered to be flooded.

The sample frequency for Total Phosphorus and Nitrates as Nitrogen was reduced to once/year when a nutrient blend is not being added to the treatment system. Continued monitoring for these parameters is required in accordance with the Nutrient Control Implementation Plan (see Section 11 of this Fact Sheet for details), but the frequency has been reduced in consideration of the previously collected data. If the facility resumes adding the nutrient blend, monthly monitoring is required to assess any changes in the nutrient concentrations in the effluent.

Parameter	Previous Permit		Final Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
OUTFALL 001				
Flow	Once/day	Totalizing meter	Once/day	Totalizing meter
BOD_5	Three/week	24-hr composite	Once/week	24-hr composite
TSS	Three/week	24-hr composite	Once/week	24-hr composite
Total Recoverable Copper	Once/month	24-hr composite	Once/6 months	24-hr composite

Parameter	Previous Permit		Final Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
Total Recoverable Zinc	Once/month	24-hr composite	Once/6 months	24-hr composite
Total Phosphorous	Once/month	24-hr composite	Once/month	24-hr composite
Total Dissolved Iron	N/A	N/A	Once/month	24-hr composite
Nitrates as Nitrogen	Once/month	24-hr composite	Once/month	24-hr composite
FCB/*E. coli*				
May – September	N/A	N/A	Once/month	Grab
October - April	N/A	N/A	Once/month	Grab
pH	Three/week	Grab	Three/week	Grab
Chronic WET	Once/2 months	24-hr composite	Once/quarter	24-hr composite
Outfall 002				
Flow	Once/day	Totalizing meter	Once/day	Totalizing meter
BOD_5				
October – July	Three/week	24-hr composite	Once/week	24-hr composite
August	Three/week	24-hr composite	Once/week	24-hr composite
September	Three/week	24-hr composite	Once/week	24-hr composite
Total Suspended Solids (TSS)	Three/week	24-hr composite	Once/week	24-hr composite
Total Recoverable Copper	Once/month	Grab	Once/6 months	Grab
Total Recoverable Zinc	Once/month	Grab	Once/6 months	Grab
Total Phosphorous	Once/month	24-hr composite	Once/month[3]	24-hr composite
Nitrates as Nitrogen	Once/month	24-hr composite	Once/month[3]	24-hr composite
pH	Three/week	Grab	Three/week	Grab

[1] Sample may consist of four grab samples taken over a 24 hour period and flow weighted.
[2] Samples shall be time-proportional composites. The permittee must collect a fixed volume of discrete sample aliquots in one container at constant time intervals by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hr period.
[3] Sampling reduced to once/year while not adding a nutrient blend (as detailed in Part II.9 of the permit) to the treatment system.

16. PERMIT COMPLIANCE SCHEDULE

The permit compliance schedule allows for a three-year period for the permittee to become compliant with the applicable pathogen indicator limits. The FCB/*E. coli* limits are a new

requirement and the permittee has not yet demonstrated that they can comply with the new limits. The interim time period will allow for the permittee to determine what, if any, action is needed. The permittee is required to comply with the FCB limits and conditions until FCB criteria are removed from Rule 2 (8 CAR Part 21). At that time, the permittee will be required to comply with the *E. coli* limits and conditions. Compliance with the limit for the applicable pathogen is required no later than three years from the effective date of the permit regardless of when/if FCB is removed from Rule 2 (8 CAR Part 21).

17. MONITORING AND REPORTING

The applicant is at all times required to monitor the discharge on a regular basis and report the results monthly. The monitoring results will be available to the public.

18. SOURCES

The following sources were used to write the permit:

A. Application No. AR0001210 received May 4, 2015, with additional information received by May 13, 2015. Updated application information was received April 6, 2023.
B. Arkansas Water Quality Management Plan (WQMP).
C. PC&EC Rule 2, codified in 8 CAR Part 21.
D. PC&EC Rule 3, codified in 8 CAR Part 22.
E. PC&EC Rule 6, codified in 8 CAR Part 25, which incorporates by reference certain federal regulations included in Title 40 of the Code of Federal Regulations at Rule 6.104, codified at 8 CAR § 25-104.
F. 40 C.F.R. Parts 120, 122, and 125.
G. 40 C.F.R. Parts 414, 430, and 454.
H. Discharge permit file AR0001210.
I. Discharge Monitoring Reports (DMRs).
J. "2022 Integrated Water Quality Monitoring and Assessment Report," DEQ.
K. "2022 List of Impaired Waterbodies (303(d) List)," DEQ.
L. *TMDLs for Segments Listed for Mercury in Fish Tissue for the Ouachita River Basin, and Bayou Bartholomew, Arkansas and Louisiana to Columbia*, December 18, 2002.
M. Continuing Planning Process (CPP).
N. "OWQ Guidelines for Decimal Places and Rounding Conventions in NPDES Permits" documented in a June 12, 2020 Interoffice Memorandum.
O. OWQ guidance memorandum "Recommended Monitoring Frequencies and Sample Types for NPDES Permits," April 14, 2022.
P. Technical Support Document for Water Quality-based Toxic Control.
Q. Inspection Report dated February 2, 2022.
R. Enforcement Review Memo dated October 29, 2024.
S. Planning Review Memo dated February 29, 2024.
T. NPDES Permit Rating Spreadsheet (MRAT) dated October 29, 2024.
U. Water Quality Model dated April 1999 (and reviewed on May 3, 2024).
V. ANHC Comment Letter dated June 3, 2025.
W. AGFC Notification of No Comments dated June 19, 2025.

X. Final Compliance Review dated June 27, 2025.

19. **PUBLIC NOTICE**

The public notice of the draft permit was published for public comment on May 25, 2025. The last day of the comment period was thirty (30) days after the publication date.

A summary of the comments received by the DEQ during the public comment period and response to the comments are included with this permit decision. The response to comments also includes a discussion of any substantial changes from the draft permit.

The DEQ conducted one (1) public hearing on the proposed permit on June 26, 2025.

Copies of the draft permit and public notice were sent via email to the Corps of Engineers, the Regional Director of the U.S. Fish and Wildlife Service, the Arkansas Department of Parks, Heritage and Tourism, the EPA, and the Arkansas Department of Health.

20. **PERMIT FEE**

In accordance with Rule 9.403(A)(1)(b), the annual fee for a non-municipal major facility with an MRAT score less than 100 is $11,000 per year.

This facility is billed under Fee Code K.

21. **POINT OF CONTACT**

For additional information, contact:

Loretta Carstens, P.E.
Permits Branch, Office of Water Quality
Division of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317
Telephone: (501) 682-0612

RESPONSE TO COMMENTS
FINAL PERMITTING DECISION

Permit No.: AR0001210

Applicant: Georgia-Pacific Crossett LLC
Crossett Paper Operations

Prepared by: Loretta Carstens, P.E.

The following are responses to comments received by Division of Environmental Quality (DEQ) regarding the draft permit number referenced above and are developed in accordance with regulations promulgated at 40 C.F.R. § 124.17, Pollution Control and Ecology Commission (PC&EC) Rule 8 (Administrative Procedures), codified at 8 CAR Part 11, and Arkansas Code Annotated § 8-4-203(e)(2).

Introduction

The above permit was submitted for public comment on May 25, 2025. The public comment period ended on June 24, 2025. DEQ conducted one (1) public hearing on the proposed permit on June 26, 2025.

This document contains a summary of the comments that DEQ received during the public comment period. A summary of the changes to the NPDES Permit can be found on the last page of this document.

The Arkansas Natural Heritage Commission sent one (1) comment to DEQ during the public notice. Mike Smith (Crossett Economic Development Foundation) submitted one (1) comment during the public hearing.

The Arkansas Game and Fish Commission stated that they had no site-specific comments or concerns with the permit.

Comment 1 Staff members of the Arkansas Natural Heritage Commission have reviewed the Draft Permit authorizing discharge into upper reaches of Mossy Lake, thence to Coffee Creek, and thence to the Ouachita River from an outfall located at 33°06’22.55” N, and 92°02’17.2” W (Outfall 001) and 33°01’58” N, and 92°04’25” W (Outfall 002) for Georgia-Pacific Crossett, LLC-Crossett Paper Operations. The following species of conservation concern are known to occur in the Ouachita River at the mouth of Coffee Creek just downstream of Outfall 002:

Atractosteus spatula, Alligator Gar-state concern

We are providing this information for your use in the preparation and review of this permit. The information may be appropriate to include in the section of the permit which addresses the receiving stream and endangered species. This letter is intended to make the Department and applicant aware that sensitive resources may occur in the area. It is not intended as an objection to the issuance of the permit.

The opportunity to comment is appreciated.

Response: The limits in the permit are designed to protect all beneficial uses of the receiving waters, including propagation of desirable species of fish and other aquatic life as well as other species which are directly or indirectly affected by the receiving waters, which includes the above species of concern. Therefore, DEQ has determined that the final permit limits will serve to help protect the species of concern identified above.

The species of concern listed above have been added to the Endangered Species section (7.C) of the Statement of Basis for this permit.

Comment 2 Mike Smith, Crossett Economic Development Foundation: I would just like to first thank Georgia Pacific, their leadership, and their environmental team for putting this application together, and I certainly appreciate our state's environmental group for taking a look at that application and making sure our community, our state, is safe. We certainly know the impact that Georgia Pacific has on our community from an economic standpoint, and we fully support the renewal of this application. We'd like to see this renewed as quickly as possible. We live and work with these guys. We know that they do great work for their company, and they also do a great job working with our community on different projects as well as doing a great job keeping our community safe, so we certainly encourage you to renew this application.

Response: DEQ acknowledges this comment and is working to finalize the permit renewal.