

STATE OF MISSISSIPPI WATER POLLUTION CONTROL PERMIT

TO DISCHARGE WASTEWATER IN ACCORDANCE WITH THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

THIS CERTIFIES THAT

International Paper Company
Columbus Mill
4335 Carson Road
Columbus, Mississippi
Lowndes County

has been granted permission to discharge wastewater into

Outfall 001 – Tennessee-Tombigbee Waterway
Outfall 002 – an unnamed tributary of Cedar Creek

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued:

Permit No. MS0036412

Expires:

899 PER20220002

PART I**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning **ISSUE DATE** and lasting until **EXPIRATION DATE**, the permittee is authorized to discharge from outfall **001 (Treated Process Wastewater, Treated Non-Process Wastewater, and Treated Sanitary Wastewater from Kraft Pulp Mill)**.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day (lbs/day)		mg/L		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow-M ³ /Day (MGD)	N/A	N/A	Report	Report	Continuous	Recorder
Total Suspended Solids	13,368 (29,450)	25,610 (56,420)	Report	Report	5 Days/Week	24-Hr. Composite
Biochemical Oxygen Demand (5-Day)	7,739 (17,050)	**	Report	Report	5 Days/Week	24-Hr. Composite
Adsorbable Organic Halides	780 (1,718)	1190 (2,622)	8.21	12.5	Twice/Year	24-Hr. Composite

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day (lbs/day)		mg/L		Measurement Frequency	Sample Type
	Quarterly Avg.	Quarterly Max.	Quarterly Avg.	Quarterly Max.		
Total Rec. Aluminum	228 (503)	376 (828)	4.60	7.58	Once/Month	24-Hr. Composite

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day (lbs/day)		pg/L		Measurement Frequency	Sample Type
	Yearly Avg.	Yearly Max.	Yearly Avg.	Yearly Max.		
2,3,7,8-TCDD	Report	1.0×10^{-6} (2.3 x 10^{-6})	Report	18	Once/Year	24-Hr. Composite

2. The pH shall not be less than **6.0** standard units nor greater than **9.0** standard units and shall be monitored **continuously**.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).)
4. The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).)
5. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): **the nearest accessible point after final treatment but prior to actual discharge or mixing with the receiving waters**. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28).)

6. **Test Method 1650, with minimum detection level of 20 µg/L, or a more recently approved EPA test method, shall be used when testing for Adsorbable Organic Halides (AOX).**
 7. **For AOX, the permittee shall comply with the Sampling Guidance for Cluster Rule Parameters found in Section C3 of the National Council for Air and Stream Improvement (NCASI) document, dated April 1998, or the most recent edition.**
 8. **For 2,3,7,8-TCDD, the test method referenced in Part III, Section E, Item 2, found on page 29 of this permit, or a more recently approved EPA test method, shall be used when testing.**
 9. **Please see page 27 for Toxicity Monitoring Conditions for Outfall 001.**
 10. **Chronic WET monitoring shall be performed once per six months for the life of the permit in accordance with Part III, Section F of this permit. If the IC₂₅ of any test is less than 6.80 %, then the effluent will be considered unacceptably chronically toxic, and this will constitute a violation of this permit.**
- ** The daily discharge shall not exceed those values allowed in Table 1, pages 10 and 11 of this permit. The monthly average loading cannot exceed 17,050 lbs/day. The daily discharge cannot exceed 31,930 lbs/day nor exceed the indicated value in the table. Flow readings shall be taken in-stream. Temperature readings shall be taken at the mill's raw water intake. Flow and Temperature readings shall be taken in concurrence with the required BOD₅ monitoring and shall be recorded in a logbook or another approved manner. River water withdrawal amounts by the permittee must be included in determining the existing flow of the Tennessee-Tombigbee Waterway for purposes of BOD₅ compliance.**

PART I

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning **ISSUE DATE** and lasting until **EXPIRATION DATE**, the permittee is authorized to discharge from outfall **002 (Non-process Wastewater and Storm Water)**.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day (lbs/day)		mg/L		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow-M ³ /Day (MGD)	N/A	N/A	Report	Report	Once/Month	Instantaneous
Total Suspended Solids	N/A	N/A	Report	Report	Once/Month	Grab

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day (lbs/day)		mg/L		Measurement Frequency	Sample Type
	Yearly Avg.	Yearly Max.	Yearly Avg.	Yearly Max.		
Oil & Grease	N/A	N/A	Report	Report	Once/Year	Grab

2. The pH shall not be less than **6.0** standard units nor greater than **9.0** standard units and shall be monitored **once per month with a**

grab sample of the effluent.

3. There shall be no discharge of floating solids or visible foam in other than trace amounts. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).)
4. The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).)
5. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): **the nearest accessible point after final treatment but prior to actual discharge or mixing with the receiving waters.** (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28).)

PART I**C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning **ISSUE DATE** and lasting until **EXPIRATION DATE**, the permittee is authorized to discharge from outfall **003 (Internal Outfall – Process Wastewater from Bleaching Plant Only)**.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day (lbs/day)		µg/L		Measurement Frequency	Sample Type*
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow-M ³ /Day (MGD)	N/A	N/A	Report	Report	Continuous	Totalizer
2,3,7,8-TCDD	Report	2.5 x 10 ⁻⁷ (5.5 x 10 ⁻⁷)	Report	0.000010	Twice/Year	24-Hr. Composite
2,3,7,8-TCDF	Report	7.8 x 10 ⁻⁷ (1.7 x 10 ⁻⁶)	Report	0.0000319	Twice/Year	24-Hr. Composite
Trichlorosyringol	Report	0.062 (0.14)	Report	2.5	Twice/Year	24-Hr. Composite
3,4,5-trichlorocatechol	Report	0.13 (0.28)	Report	5.0	Twice/Year	24-Hr. Composite
3,4,6-trichlorocatechol	Report	0.13 (0.28)	Report	5.0	Twice/Year	24-Hr. Composite
3,4,5-trichloroguaiacol	Report	0.062 (0.14)	Report	2.5	Twice/Year	24-Hr. Composite
3,4,6-trichloroguaiacol	Report	0.062 (0.14)	Report	2.5	Twice/Year	24-Hr. Composite

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day (lbs/day)		µg/L		Measurement Frequency	Sample Type*
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
4,5,6-trichloroguaiacol	Report	0.062 (0.14)	Report	2.5	Twice/Year	24-Hr. Composite
2,4,5-trichlorophenol	Report	0.062 (0.14)	Report	2.5	Twice/Year	24-Hr. Composite
2,4,6-trichlorophenol	Report	0.062 (0.14)	Report	2.5	Twice/Year	24-Hr. Composite
Tetrachlorocatechol	Report	0.13 (0.28)	Report	5.0	Twice/Year	24-Hr. Composite
Tetrachloroguaiacol	Report	0.13 (0.28)	Report	5.0	Twice/Year	24-Hr. Composite
2,3,4,6-tetrachlorophenol	Report	0.062 (0.14)	Report	2.5	Twice/Year	24-Hr. Composite
Pentachlorophenol	Report	0.13 (0.28)	Report	5.0	Twice/Year	24-Hr. Composite
Chloroform	5.2 (11.4)	8.66 (19.1)	128	215	24-Hr. Composite (See Item 5)	

2. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): **Stage 1-D100, Stage 2-E₀, Stage 3-D1, and Stage 4-D2.** See diagram and description on Page 33 of this permit.
3. The following methods with the listed minimum detection levels shall be used:

<u>Parameter</u>	<u>Method</u>	<u>Minimum Level</u>
2,3,7,8-TCDD	1613	10 pg/L
2,3,7,8-TCDF	1613	10 pg/L

Trichlorosyringol	1653	2.5 µg/L
3,4,5-trichlorocatechol	1653	5.0 µg/L
3,4,6-trichlorocatechol	1653	5.0 µg/L
3,4,5-trichloroguaiacol	1653	2.5 µg/L
3,4,6-trichloroguaiacol	1653	2.5 µg/L
4,5,6-trichloroguaiacol	1653	2.5 µg/L
2,4,5-trichlorophenol	1653	2.5 µg/L
2,4,6-trichlorophenol	1653	2.5 µg/L
Tetrachlorocatechol	1653	5.0 µg/L
Tetrachloroguaiacol	1653	5.0 µg/L
2,3,4,6-tetrachlorophenol	1653	2.5 µg/L
Pentachlorophenol	1653	5.0 µg/L

4. For Outfall 003, the permittee shall comply with the Sampling Guidance for Cluster Rule Parameters found in Section C3 of the National Council for Air and Stream Improvement (NCASI) document, dated April 1998, or the most recent edition.
 5. In lieu of monitoring, the permittee has applied for the chloroform certification alternative found in 40 CFR Part 430. The permittee shall comply with all requirements of the chloroform certification alternative and shall certify at the time of DMR submittal the following:
 - a) The chlorine-containing compounds used for bleaching are unchanged from those identified under 40 CFR 430.02(f)(2)(iii); and
 - b) The following process and operating conditions maintained on the fiber line during the reporting period have not exceeded the maximum value recorded for each such condition during the collection of the samples used to make the demonstration required under paragraphs 40 CFR 430.02(f)(2)(i) or (f)(3)(i): (1) The pH of the first chlorine dioxide bleaching stage; (2) The chlorine (Cl₂) content of chlorine dioxide (ClO₂) used on the bleach line; (3) The kappa factor of the first chlorine dioxide bleaching stage; and (4) The total bleach line chlorine dioxide application rate. (Ref.: 40 CFR 430.02(f))
- * 24-Hr. Composite samples (grab samples taken every 4 hours and composited based on effluent flow) shall consist of 24-Hr. flow proportioned composite samples from Stages 1 through 4. See Page 33 for flow diagram and description. D100, D1, and D2 stage effluent samples will be composited for the acid sewer composite sample based on 24-hr average flows for each of the stages. E₀ stage effluent samples shall be composited for the alkaline sewer composite sample.

TABLE 1 - (DAILY MAXIMUM ALLOWABLE BOD₅ (LBS/DAY) DISCHARGE LIMITS)

CFS	TEMPERATURE ° C													
	T<10°	10°≤T<11°	11°≤T<12°	12°≤T<13°	13°≤T<14°	14°≤T<15°	15°≤T<16°	16°≤T<17°	17°≤T<18°	18°≤T<19°	19°≤T<20°	20°≤T<21°	21°≤T<22°	
300	3300	3100	2900	2700	2500	2300	2100	2000	1800	1700	1500	1400	1300	
400	4800	4500	4100	3750	3400	3200	2900	2700	2500	2300	200	*0	1900	1700
500	6200	5700	5200	4800	4400	4100	3700	3400	3100	2800	2500	2300	2100	
600	7500	7000	6400	5850	5300	4900	4400	4100	3700	3400	3000	2800	2500	
700	10700	9900	9000	8150	7300	6600	5800	5300	4800	4300	3800	3500	3100	
800	14000	12800	11600	10400	9200	8200	7100	6500	5800	5200	4500	4100	3700	
900	16500	15200	13800	12400	11000	9700	8400	7800	7100	6300	5500	5000	4400	
1000	19000	17500	16000	14500	13000	11700	10400	9500	8500	7500	6500	5900	5200	
1100	22600	20800	19200	17920	16600	14500	12400	11300	10100	9000	7800	7000	6200	
1200	23800	22400	21400	21330	20200	17300	14400	13100	11700	10400	9100	8200	7200	
1300	26300	24700	23100	22800	22460	19600	16700	15100	13400	11900	10400	9400	8300	
1400	28700	27000	25300	24022	23000	20600	18500	16800	15000	13400	11700	10500	9300	
1500	31100	29300	27500	26132	25000	22700	20600	18600	16600	14800	13000	11700	10300	
1600	31930	31600	29700	28242	26800	24600	22500	20500	18500	16400	14300	12900	11500	
1700	*	31930	31900	30352	28800	25900	23000	21800	20600	18200	15700	14100	12500	
1800	*	*	31930	31930	30800	27700	24600	23500	22500	20700	19000	16400	13800	
1900	*	*	*	*	31930	29500	26200	24300	22460	21700	21000	18200	15300	
2000	*	*	*	*	*	31400	27900	25800	23800	23100	22500	19500	16600	
2200	*	*	*	*	*	31930	31100	28900	26600	24600	22500	20900	19200	
2400	*	*	*	*	*	*	31930	31900	29400	27200	25000	23700	22460	
2600	*	*	*	*	*	*	*	31930	31930	29900	27500	24600	22100	
2800	*	*	*	*	*	*	*	*	*	31930	29900	27000	24100	
3000	*	*	*	*	*	*	*	*	*	*	31930	29200	26100	
3200	*	*	*	*	*	*	*	*	*	*	*	31500	28100	
3400	*	*	*	*	*	*	*	*	*	*	*	31930	30100	
3600	*	*	*	*	*	*	*	*	*	*	*	*	31930	
3800	*	*	*	*	*	*	*	*	*	*	*	*	*	
4000	*	*	*	*	*	*	*	*	*	*	*	*	*	
4200	*	*	*	*	*	*	*	*	*	*	*	*	*	
4400	*	*	*	*	*	*	*	*	*	*	*	*	*	
4600	*	*	*	*	*	*	*	*	*	*	*	*	*	
4800	*	*	*	*	*	*	*	*	*	*	*	*	*	
5000	*	*	*	*	*	*	*	*	*	*	*	*	*	
5500	*	*	*	*	*	*	*	*	*	*	*	*	*	
6000	*	*	*	*	*	*	*	*	*	*	*	*	*	
6500	*	*	*	*	*	*	*	*	*	*	*	*	*	
7000	*	*	*	*	*	*	*	*	*	*	*	*	*	
7500	*	*	*	*	*	*	*	*	*	*	*	*	*	
8000	*	*	*	*	*	*	*	*	*	*	*	*	*	
8500	*	*	*	*	*	*	*	*	*	*	*	*	*	
9000	*	*	*	*	*	*	*	*	*	*	*	*	*	
9500	*	*	*	*	*	*	*	*	*	*	*	*	*	
10000	*	*	*	*	*	*	*	*	*	*	*	*	*	

TABLE 1 (continued) - (DAILY MAXIMUM ALLOWABLE BOD₅ (LBS/DAY) DISCHARGE LIMITS)

CFS	TEMPERATURE ° C											
	22°<T<23°	23°<T<24°	24°<T<25°	25°<T<26°	26°<T<27°	27°<T<28°	28°<T<29°	29°<T<30°	30°<T<31°	31°<T<32°	32°<T<33°	33°<T
300	1200	1000	950	900	700	400	200	0	0	0	0	0
400	1600	1400	1200	1000	800	500	300	0	0	0	0	0
500	1900	1600	1400	1200	1000	700	500	200	100	0	0	0
600	2300	2000	1800	1500	1200	900	600	300	200	0	0	0
700	2800	2400	2100	1800	1500	1200	900	500	400	200	100	0
800	3300	2800	2500	2100	1700	1300	1000	600	500	300	200	0
900	3900	3400	3000	2500	2100	1700	1300	800	600	400	200	0
1000	4600	3900	3500	3000	2500	2000	1500	1000	800	500	400	200
1100	5400	4600	4100	3500	3000	2400	1800	1200	1000	700	500	300
1200	6300	5400	4800	4100	3400	2700	2100	1500	1200	900	700	400
1300	7200	6100	5400	4600	3900	3100	2400	1700	1400	1100	800	500
1400	8100	6900	6100	5200	4300	3400	2700	2000	1600	1200	900	600
1500	9000	7600	6700	5700	4700	3600	2900	2200	1800	1400	1100	700
1600	10000	8500	7400	6200	5100	3900	3200	2500	2100	1600	1200	800
1700	11000	9400	8100	6700	5400	4100	3500	2800	2300	1800	1400	900
1800	12000	10200	8800	7300	5800	4200	3600	3000	2500	2000	1500	1000
1900	13200	11100	9500	7800	6100	4400	3800	3200	2700	2200	1700	1100
2000	14800	13000	10700	8300	6400	4500	4200	3900	3200	2400	1800	1200
2200	17200	15200	12500	9700	8000	6200	5500	4700	3800	2800	2100	1400
2400	20100	17800	14600	11400	9700	7900	6900	5900	4700	3500	2600	1700
2600	21500	20800	17100	13300	11500	9600	8400	7100	5800	4400	3400	2300
2800	23300	22460	19000	15600	13000	10400	9400	8300	6800	5300	4000	2600
3000	25700	24000	21800	18200	14700	11200	10400	9500	8000	6500	4700	2900
3200	27900	26500	24500	21300	17200	13000	12300	11500	9400	7200	5100	3000
3400	30200	29000	26400	22460	18600	14800	13500	13000	10500	8000	5800	3500
3600	31930	31000	28800	24800	21100	17500	16000	15700	12100	8600	6300	4000
3800	*	31930	31100	27100	23300	19600	18800	18000	14600	11200	7900	4500
4000	*	*	31930	29300	25900	22460	22000	21500	17500	13500	9400	5300
4200	*	*	*	31500	27900	24200	23300	22460	18500	14500	10700	6800
4400	*	*	*	31930	30100	26400	25500	25700	21600	17500	13000	8400
4600	*	*	*	*	31930	28700	28000	28000	23800	19500	14700	9900
4800	*	*	*	*	*	30900	30000	29500	26000	22460	16900	11400
5000	*	*	*	*	*	31930	31930	31000	27500	24000	19100	14200
5500	*	*	*	*	*	*	*	31930	31930	29500	25800	22460
6000	*	*	*	*	*	*	*	*	*	31930	31000	27000
6500	*	*	*	*	*	*	*	*	*	*	31930	31930
7000	*	*	*	*	*	*	*	*	*	*	*	*
7500	*	*	*	*	*	*	*	*	*	*	*	*
8000	*	*	*	*	*	*	*	*	*	*	*	*
8500	*	*	*	*	*	*	*	*	*	*	*	*
9000	*	*	*	*	*	*	*	*	*	*	*	*
9500	*	*	*	*	*	*	*	*	*	*	*	*
10000	*	*	*	*	*	*	*	*	*	*	*	*

D. SCHEDULE OF COMPLIANCE

6. The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule:

Upon permit issuance. Additionally, upon permit issuance, the permittee shall have completed their once every five year review and re-evaluation of the Best Management Practices (BMP) Plan as established and required by 40 CFR 430.03. Within 30 days after permit issuance, the permittee shall submit written documentation of compliance with this requirement to the Mississippi Environmental Quality Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(9) and 40 CFR 430.03)

E. DEFINITIONS

7. "Monthly average" means the 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 the month. The monthly average for *E. coli* bacteria is the geometric mean of "daily discharges" measured during the calendar month. In computing the geometric mean for *E. coli* bacteria, the value one (1) shall be substituted for sample results of zero. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.1.A(44).)
8. "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. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily average" is calculated as the average measurement of the discharge of the pollutant over the day. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.1.A(15).)
9. "Daily maximum" means the highest "daily discharge" over a calendar month. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.1.A(16).)
10. "Quarterly average" means the average of "daily discharges" over a three-month period, calculated as the sum of all "daily discharges" measured during the quarter divided by the number of "daily discharges" measured during the quarter. The quarterly average for *E. coli* bacteria is the geometric mean of "daily discharges" measured during the quarter. In computing the geometric mean for *E. coli* bacteria, the value one (1) shall be substituted for sample results of zero. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.1.A(61).)
11. "Quarterly maximum" means the highest "daily discharge" measured over a three-month period. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.1.A(62).)
12. "Yearly average" means the average of "daily discharges" over a calendar year, calculated as the sum of all "daily discharges" measured during the calendar year divided by the number of "daily discharges" measured during the calendar year. The yearly

average for *E. coli* bacteria is the geometric mean of "daily discharges" during the calendar year. In computing the geometric mean for *E. coli* bacteria, the value one (1) shall be substituted for sample results of zero. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.1.A(87).)

13. "Yearly maximum" means the highest "daily discharge" measured over a calendar year. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.1.A(88).)
14. "Toxic pollutants" include, but are not limited to: (a) any toxic substance listed in Section 307(a)(1) of the Clean Water Act (CWA), any chemical listed in Section 313(c) of the Superfund Amendments and Reauthorization Act (SARA) of 1986; and (b) any substance (that is not also a conventional or non-conventional pollutant) for which EPA or the State has published an acute or chronic toxicity criterion. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.1.A(71).)
15. "Hazardous substances" are defined in 40 CFR 116.4. (Ref.: 40 CFR 116.4)
16. "Submitted" means the document is postmarked on or before the applicable deadline, except as otherwise specified. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.1.A (67).)

F. MONITORING AND REPORTING

17. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored wastewater. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.1.4.A(28)(e).)

18. Reporting

- a) Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report (DMR). DMR data must be submitted electronically using the MDEQ NetDMR system NO LATER THAN THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD.

DMRs and all other reports required herein, shall be signed in accordance with 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(1). of the Mississippi Wastewater Regulations. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(1)., 40 CFR 122.21(1)(4)(i)]

- b) If the results for a given sample analysis are such that any parameter (other than *E. coli*) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in calculating an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall report "NODI = B" on the DMR. For *E. coli*, a value of 1.0 shall be used in calculating the geometric mean. If the resulting *E. coli* mean value is 1.0, the permittee shall report "NODI = B" on the DMR. For each

quantitative sample value that is not detectable, the test method used and the minimum level for that method for that parameter shall be attached to and submitted with the DMR. The permittee shall then be considered in compliance with the appropriate effluent limitation and/or reporting requirement. (Ref.: 11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 2. Section VI.G)

- c) If the permittee monitors any pollutant as prescribed in the permit more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(2).)
- d) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Permit Board in the permit. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(1).)

19. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(h) of the Federal Water Pollution Control Act, as amended or alternative procedures approved and/or promulgated by EPA. For those parameters listed in Exhibit D of the Mississippi Wastewater Permit Regulations, the permittee shall use approved methods with minimum quantification levels as sensitive as those found in Exhibit D of the regulations. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(30).)

20. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including:

- a) The exact place, date, and time of sampling;
- b) The dates the analyses were performed;
- c) The person(s) who performed the analyses;
- d) The analytical techniques, procedures, or methods used; and
- e) The results of all required analyses. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).)

21. Records Retention

All records and results of monitoring activities required by this permit, including calibration and maintenance records, shall be retained by the permittee for a minimum of

three (3) years, unless otherwise required or extended by the Permit Board, copies of which shall be furnished to the Department upon request. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).)

22. Falsifying Reports

Any permittee who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Permit Board to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods and/or any written report required by or in response to a permit condition, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for a violation of a permit condition pursuant to Section 49-17-43 of the Code. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(d).)

PART II

A. MANAGEMENT REQUIREMENTS

1. Facility Expansion and/or Modification

Any facility expansion, production increases, process modifications, changes in discharge volume or location, or other changes in operations or conditions of the permittee which may result in a new or increased discharge of waste, shall be reported to the Permit Board by submission of a new application for a permit pursuant to Section II.A. of the Mississippi Wastewater Regulations, or if the discharge does not violate effluent limitations specified in the permit, by submitting to the Permit Board a notice of a new or increased discharge. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(14).)

2. Duty to Comply 40 CFR 122.41(a)

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(2).)

3. Noncompliance Notification

a) Twenty-Four Hour Reporting

- (1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. 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 a description of the noncompliance and its cause; 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; and steps taken or planned to reduce, eliminate, and/or prevent recurrence of the noncompliance.
- (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - ii. Any upset which exceeds any effluent limitation in the permit.
 - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Permit Board in the permit to be reported within 24 hours.

- iv. The Executive Director may waive the written report on a case-by-case basis for reports under paragraph a) of this section if the oral report has been received within 24 hours.

All reports required by this condition which are submitted after December 20, 2025 shall be submitted by the permittee electronically as instructed by MDEQ. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(e.), 40 CFR 122.41.(1)(6)]

b) Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph a) at the time monitoring reports are submitted or within 30 days from the end of the month in which the noncompliance occurs. The reports shall contain the information listed in paragraph a).

All reports required by this condition which are submitted after December 20, 2025 shall be submitted by the permittee electronically as instructed by MDEQ. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(e.), 40 CFR 122.41.(1)(6)]

c) 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 Permit Board, it shall promptly submit such facts or information. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(e).)

4. Proper Operation, Maintenance, and Replacement

The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, 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 includes adequate laboratory controls and appropriate quality assurance procedures. Proper replacement includes maintaining an adequate inventory of replacement equipment and parts for prompt replacement when necessary to maintain continuous collection and treatment of wastewater. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(18).)

5. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. (Ref.: 11 Miss. Admin. Code Pt.

6, R. 1.1.4.A(19).)

6. Bypassing

The permittee shall comply with the terms and conditions regarding bypass found in 40 CFR 122.41(m). (Ref.: 40 CFR 122.41(m))

All reports required by this condition which are submitted after December 20, 2025 shall be submitted by the permittee electronically as instructed by MDEQ. (Ref.: 40 CFR 122.41(m)(3)(i, ii))

7. Bypassing - Definitions

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

"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 production. (Ref.: 40 CFR 122.41(m))

8. Bypassing - Bypass not exceeding limitations

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 notice and prohibition provisions of the bypass requirements in this permit. (Ref.: 40 CFR 122.41(m))

9. Bypassing - Notice

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.

Unanticipated bypass-

The permittee shall submit notice of an unanticipated bypass as required by the twenty-four hour reporting requirements set forth in this permit.

All reports required by this condition which are submitted after December 20, 2025 shall be submitted by the permittee electronically as instructed by MDEQ. (Ref.: 40 CFR 122.41(m)(3)(i, ii))

10. Bypassing - Prohibition of Bypass

(1) Bypass is prohibited, and the Commission may take enforcement action against a permittee unless:

(i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(ii) There was 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 adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(iii) The permittee submitted notices as required under the Twenty-Four Hour reporting requirements set forth in this permit.

(2) The Commission may approve an anticipated bypass, after considering its adverse effects, if the Commission determines that it will meet the three conditions listed above in paragraph (1) of this permit condition. (Ref.: 40 CFR 122.41(m))

11. Upsets

The permittee shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets" and as follows:

a) Definition. "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. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b) 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 paragraph c) of this condition are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, shall not constitute final administrative action subject to judicial review.

c) 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 cause(s) of the upset;

- (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset as required in 40 CFR 122.41(L)(6)(ii)(B) (24-hour notice of noncompliance).
 - (4) The permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate).
- d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).)

12. Removed Substances

Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, and the Mississippi Water Pollution Control Act. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(21).)

13. Power Failures

If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either:

- a) Provide an alternative power source to operate the wastewater control facilities; or, if such alternative power source is not in existence, and no date for its implementation appears in the permit,
- b) Halt, reduce, or otherwise control production and/or all wastewater flows upon reduction, loss, or failure of the primary source of power to the wastewater control facilities. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(22).)

B. RESPONSIBILITIES

1. Inspection and Entry

The permittee shall allow any authorized Commission representative to enter the permittee's premises at any reasonable time, to have access to and copy any applicable records, to inspect process facilities, treatment works, monitoring methods or equipment or to take samples, as authorized by Section 49-17-21 of the Code. In the event of investigation during an emergency response action, a reasonable time shall be any time of the day or night. Follow-up investigations subsequent to the conclusion of the emergency event shall be conducted at reasonable times. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(17).)

2. Transfer of Ownership or Control

This permit is not transferable to any person except after proper notice and approval by the Permit Board. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the Mississippi Environmental Quality Permit Board at least thirty (30) days in advance of the proposed transfer date. The notice should include a written agreement between the existing and new permittees containing a specific date for the transfer of permit responsibility, coverage, and liability. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.5.C.)

3. Signatory Requirements 40 CFR 122.41(k)

All applications, reports, or information submitted to the Permit Board shall be signed and certified.

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: (1) 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 function for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding 25 million (in second quarter 1980 dollars), if 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 the proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

b) All reports required by the permit and other information requested by the Permit Board 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 specifies 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 having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
- (3) The written authorization is submitted to the Permit Board.

- c) Changes to authorization. If an authorization under paragraph b) of this condition is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b) of this condition must be submitted to the Permit Board prior to or together with any reports, information, or applications.
- d) Certification. Any person signing a document under paragraphs a) or b) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under the 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." (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.)

4. Availability of Records

Except for information deemed to be confidential under the Mississippi Code Ann. 49-17-39 and 40 CFR 123.41, file information relating to this permit shall be made available for public inspection and copying during normal business hours at the office of the Department of Environmental Quality in Jackson, Mississippi. Written request must be provided in accordance with policies developed by the Commission and must state, specifically, records proposed for review, date proposed for review, and copying requirements. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.3.E.)

5. Duty to Provide Information

The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Permit Board upon request, copies of records required to be kept by the permit. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(16).)

6. Toxic Pollutants

The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(26).)

7. Toxic Pollutants Notification Requirements

The permittee shall comply with the applicable provisions of 40 CFR 122.42. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(26).)

8. Civil and Criminal Liability

- a) Any person who violates a term, condition, or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law.
- b) Except as provided in permit conditions on "Bypassing" and "Upsets" (PART IIA.6 through 11), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
- c) It shall not be the defense of the 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. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(24).)

9. 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 Federal Water Pollution Control Act and applicable provisions under Mississippi Law pertaining to transportation, storage, treatment, or spillage of oil or hazardous substances. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(23).)

10. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or 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. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.5.E.)

11. Severability

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(25).)

12. Expiration of Permit

At least 180 days prior to the expiration date of this permit pursuant to the State law and regulation, the permittee who wishes to continue to operate under this permit shall submit an application to the Permit Board for reissuance. The Permit Board may grant permission to submit an application later than this, but no later than the expiration date of the permit. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.B(1).)

13. Protection of Confidential Information

- a) Pursuant to Miss. Code Ann. ' 49-17-39 and 40 CFR 123.41, the Permit Board shall make available to the public all information contained on any form and all public comments on such information. Effluent data and information concerning air or water quality shall also be made available to the public. Information that is determined by the Commission to be trade secrets shall not be disclosed to the public without prior consent of the source of such information. When a claim of confidentiality is made by a person in accordance with the provisions of Miss. Code Ann. ' 49-17-39, a recommendation on the questions of confidentiality shall be made by the Commission and forwarded to the Regional Administrator (or his/her designee) of EPA for his concurrence in such determination of confidentiality.
- b) A copy of a State, UIC, or NPDES permit application, public notice, fact sheet, draft permit, and other forms relating thereto, including written public comment and other reports, files, and information relating to the application not classified as confidential information by the Commission pursuant to PART IIB.13.a), shall be available for public inspection and copying during normal business hours at the office of the Department in Jackson, Mississippi.
- c) Upon determination by the Commission that information submitted by a permit applicant is entitled to protection against disclosure as trade secrets, the information shall be so labeled and otherwise handled as confidential. Copies of the information and a notice of the Commission's action shall be forwarded to the Regional Administrator (or his/her designee). In making its determination of entitlement to protection as a trade secret, the Commission shall follow the procedure set forth in Miss. Code Ann. ' 49-17-39. In the event the Commission denies the claim of confidentiality, the applicant shall have, upon notification thereof, the right to appeal the Commission's determination in the same manner provided for other orders of the Commission. No disclosure, except to EPA, shall be allowed until any appeal from the determination of the Commission is completed. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.)

14. Spill Prevention and Best Management Plans

Any permittee which has above ground bulk storage capacity, of more than 1,320 gallons or any single container with a capacity greater than 660 gallons, of materials and/or liquids (including but not limited to, all raw, finished, and/or waste material) with chronic or acute potential for pollution impact on waters of the State and not subject to Mississippi Hazardous Waste Management Regulations or 40 CFR Part 112 (Oil Pollution Prevention) regulations shall provide secondary containment as found in 40 CFR Part 112 or equivalent protective measures such as trenches or waterways which would conduct any tank releases to a permitted treatment system or sufficient equalization or treatment capacity needed to prevent chronic/acute pollution impact. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(12)(a).)

15. Permit Actions

The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a modification of planned changes or anticipated noncompliance, does not stay any permit condition. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.5.C(5).)

PART III

A. REOPENER CLAUSE

This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation, or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2), and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation, or regulation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit.
2. Controls any pollutant not limited in the permit.
3. This permit shall be modified to reflect any additional or otherwise more stringent limitations and additional monitoring as determined to be necessary by the results of a Completed TMDL.
4. **The permit shall be reopened and modified if the Mississippi Department of Environmental Quality establishes a Water Quality Limit for color or if the color of the Tennessee-Tombigbee Waterway downstream of the effluent mixing zone shows a significant adverse aesthetic impact.**
5. **The permit shall be reopened to allow modifications of the final dioxin limits in the event of possible revision of the dioxin carcinogenic potency factor and/or other such developments.**
6. **The permit shall be reopened and modified if the Environmental Protection Agency promulgates an effluent limit guideline for Chemical Oxygen Demand.** (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.F(1).)

B. CLOSURE REQUIREMENTS

Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall provide a Closure Plan to the Permit Board no later than 90 days prior to doing so. This Closure Plan shall address how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste and residues will be removed from the premises or permanently disposed of on-site such that no potential environmental hazard to the waters of the State will be presented. Closure plan(s) submitted to and approved by the Mississippi Department of Environmental Quality for compliance with other environmental regulations will satisfy the closure requirements for those items specifically addressed in the closure plan(s) as long as the closure does not present a potential for environmental hazard to waters of the State. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(11).)

C. REQUIREMENTS REGARDING COOLING AND BOILER WATER ADDITIVES

Notification shall be made to the permitting authority in writing not later than sixty (60) days prior to initiating the addition of any chemical product to the cooling water and/or boiler water which is subject to discharge, other than those previously approved and/or used. Such notification should include, but not be limited to:

1. Name and composition of the proposed additive;
2. Proposed discharge concentration;
3. Dosage addition rates;
4. Frequency of use;
5. EPA registration, if applicable; and
6. Aquatic species toxicological data.

Written approval must be received from the permitting authority prior to initiating use. (Ref.: 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(14).)

D. TOXICITY MONITORING CONDITIONS FOR OUTFALL 001

For Outfall 001, the permittee shall monitor for Total Recoverable Cadmium and Total Recoverable Copper twice per month for six months with a 24-Hour composite sample of the effluent beginning the month following the effective issuance date of the permit. All monitoring results shall be submitted to the Mississippi Environmental Quality Permit Board under separate cover from the DMR submittal no later than the 28th day of the month following the completed collection of all 24 samples. The permit may be re-opened after receipt of this data and application of procedures set forth in the water quality-based effluent limitations chapter of the "State of Mississippi Wastewater Regulations." Samples for these parameters shall be analyzed using an EPA approved method with at least the following Minimum Quantitation Level (MQL):

<u>Parameter</u>	<u>MQL</u>
Total Recoverable Cadmium	0.5 µg/L
Total Recoverable Copper	0.5 µg/L

E. OTHER SPECIAL CONDITIONS

1. Instream Monitoring

- a. **The permittee shall implement the revised monitoring plan submitted on April 27, 2005 for the discharge into the Tennessee-Tombigbee Waterway during periods of low river flow. The monitoring plan allows for measurement of dissolved oxygen, pH, temperature, conductivity, and color both upstream and downstream of the discharge. This data shall be reported monthly under separate cover from the Discharge Monitoring Reports.**
- b. **The permittee shall take all steps necessary to assure that its effluent discharge does not result in the Alabama portion of the Tennessee-**

Tombigbee Waterway having dissolved oxygen levels, at the five-foot depth, below 5 mg/L as determined by the permittee's computer model, or field surveys by the permittee, the Mississippi Department of Environmental Quality, or the Alabama Department of Environmental Management. If the dissolved oxygen level measured in the river upstream of the effluent discharge is less than 5 mg/L, the permittee shall not cause the dissolved oxygen level of the river to decrease below the upstream level.

2. Dioxin Monitoring Conditions

In addition to the effluent limitations specified in Part I of this permit, the permittee is required to monitor once per year with a 24-hour composite sample for all chloro-dibenzo dioxins and furans displayed in Table 2 on the next page at the following locations:

- a. Sludge from Kraft Mill Facility
- b. Final Effluent (from Outfall 001)

The method of analysis for each sample shall be the appropriate method of analysis specified in Analytical Procedures and Quality Assurance for Multimedia Analysis of Polychlorinated Dibenzo-para-dioxins and Polychlorinated Dibenzofurans by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry, EPA, 1990 (EPA Method 8290) or Tetra- through Octa- Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS, EPA, 1994 (EPA Method 1613, Revision B) or another equivalent analytical protocol approved by EPA. For each sampling period, the limit of detection shall be reported for each sample analyzed.

If an analysis for a given sample results in a measurement of "less than the limit of detection" or below 10 ppq, a value of zero will be used for that sample in calculating an average arithmetic effluent value for that parameter. For the effluent from Outfall 001 only, monitoring results for the previous year for chloro-dibenzo dioxins and furans in Table 2 and toxicity testing results shall be submitted. Monitoring results shall be submitted as a separate report from the discharge monitoring reports and by the 28th day of the month following the completed reporting period. The limit of detection shall be reported for each analysis and be included in the report.

These samples shall be analyzed and reported for all isomers of chloro-dibenzo dioxins and furans in Table 2 and also reported as Toxicity Equivalents (TEQ) based on the relative toxic equivalence factors listed in Table 2:

TABLE 2
CDD/CDF ISOMERS OF MOST TOXIC CONCERN

CHLORO-DIBENZO DIOXIN		CHLORO-DIBENZO FURAN	
Isomer	TEF^a	Isomer	TEF^a
2,3,7,8-TCDD	1	2,3,7,8-TCDF	0.1
1,2,3,7,8-PeCDD	1	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF	0.03 0.3
1,2,3,4,7,8-HxCDD	0.1	1,2,3,4,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDD	0.1	1,2,3,7,8,9-HxCDF	0.1
1,2,3,6,7,8-HxCDD	0.1	1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF	0.1 0.1
1,2,3,4,6,7,8-HpCDD	0.01	1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.01 0.01
OCDD	0.0003	OCDF	0.0003

^aTEF = Toxic Equivalence Factor = Relative Toxicity Assigned.

3. Uncontaminated Storm Water Discharge

The permittee is allowed to discharge uncontaminated storm water from the holding ponds through the outfall structure to the Tennessee-Tombigbee Waterway.

4. Best Management Practices (BMP) Plan

The permittee shall continue to comply with all Best Management Practices requirements for spent pulping liquor, soap, and turpentine management, spill prevention, and control as established in 40 CFR 430.03.

F. CHRONIC BIOASSAY REQUIREMENTS

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate and Coastal Waters, Section II.4., Minimum Conditions Applicable to All Waters, page 3, adopted March 22, 1990). In accordance with such requirements, the permittee is authorized to discharge from Outfall 001 only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.
2. The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/821/R-02/013) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/821/R-02/014) or the most recent edition*.
 - a. Dilution water used for these tests shall consist of reagent grade water, defined as distilled or deionized water that does not contain substances which are toxic to the test organisms. For freshwater tests, dilution water shall consist of reagent grade chemicals or mineral water combined to make moderately hard dilution water according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013) or most recent edition*. For estuarine testing, dilution water shall consist of synthetic seawater or hypersaline brine combined to achieve a salinity of 20 parts per thousand according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA/821/R-02/012) or most recent edition*. These dilution waters will be deemed acceptable if the control organisms in the toxicity tests meet the minimum EPA criteria for chronic tests.
 - b. If the Mississippi Office of Pollution Control determines the receiving waters are freshwater, the permittee shall conduct a *Ceriodaphnia dubia* Survival and Reproduction Test, and a *Pimephales promelas* Larval Survival and Growth Test on serial dilutions of effluent to determine if the discharge from Outfall 001 is chronically toxic. Such testing will determine if the water affects the survival, growth, and reproduction of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of

effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/821/R-02/013), or the most recent edition*, are met. All data shall be statistically analyzed according to the referenced manual.

- c. If the Mississippi Office of Pollution Control determines that the receiving water is estuarine, the permittee shall conduct a *Menidia beryllina* Larval, Survival, and Growth Test and a *Mysidopsis bahia* Survival, Growth, and Fecundity Test on serial dilutions of effluent to determine if the discharge from Outfall 001 is chronically toxic. Such testing will determine if the water affects the survival, growth, and fecundity of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/821/R-02/014) or most recent edition* are met. All test data shall be statistically analyzed according to the referenced manual.
- d. A standard reference toxicant quality assurance test (chronic) shall be conducted concurrently with the effluent tests using both species used in the toxicity tests. Alternatively, if a lab conducts monthly QA/QC reference toxicant tests with both species as part of their SOP, these results may be submitted in lieu of the above mentioned concurrent tests results. In either case, the reference toxicant test results must be submitted with the final report as well as on the Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.

****3.** These chronic toxicity tests shall be initiated within 90 days of the date of

issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted once per quarter for a period of one year following the effective date of the permit. After the first year of monitoring, provided the IC₂₅ is greater than or equal to 6.80 %, the frequency of monitoring will be reduced to once per six months for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot-dry and cold-wet).***

4. If any one chronic toxicity test indicates the IC₂₅ is less than 6.80 %, the provisions in Section 6 below shall apply, and the permittee shall conduct another chronic toxicity test(s) with the organism(s) that failed. This follow-up test must be completed within 30 days following completion of the failed test. Final chronic toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA 821/R-02/012) or most recent edition*. The permittee must also submit a completed Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.
5. In the event the permittee passes the additional WET test, the permittee shall resume testing in accordance with the testing schedule set forth in the permit. In the event the permittee fails the second WET test, the permittee shall submit a Toxicity Reduction Evaluation Plan (TREP) within 45 days following completion of the follow-up test in order to reduce the toxicity of the effluent to safe (note 1) levels (note 2). The first phase of the TREP will include increased monitoring to characterize the toxicity of the effluent.
6. If the IC₂₅ of any test is less than 6.80 %, then the effluent will be considered unacceptably chronically toxic, and this will constitute a violation of this permit.

(note 1) Safe levels will be determined by 11 Miss. Admin. Code Pt. 6, Chapter 2.

(note 2) In large rivers, lakes, and estuaries the permittee must provide a schematic map showing isopleths of waste concentrations.

In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).

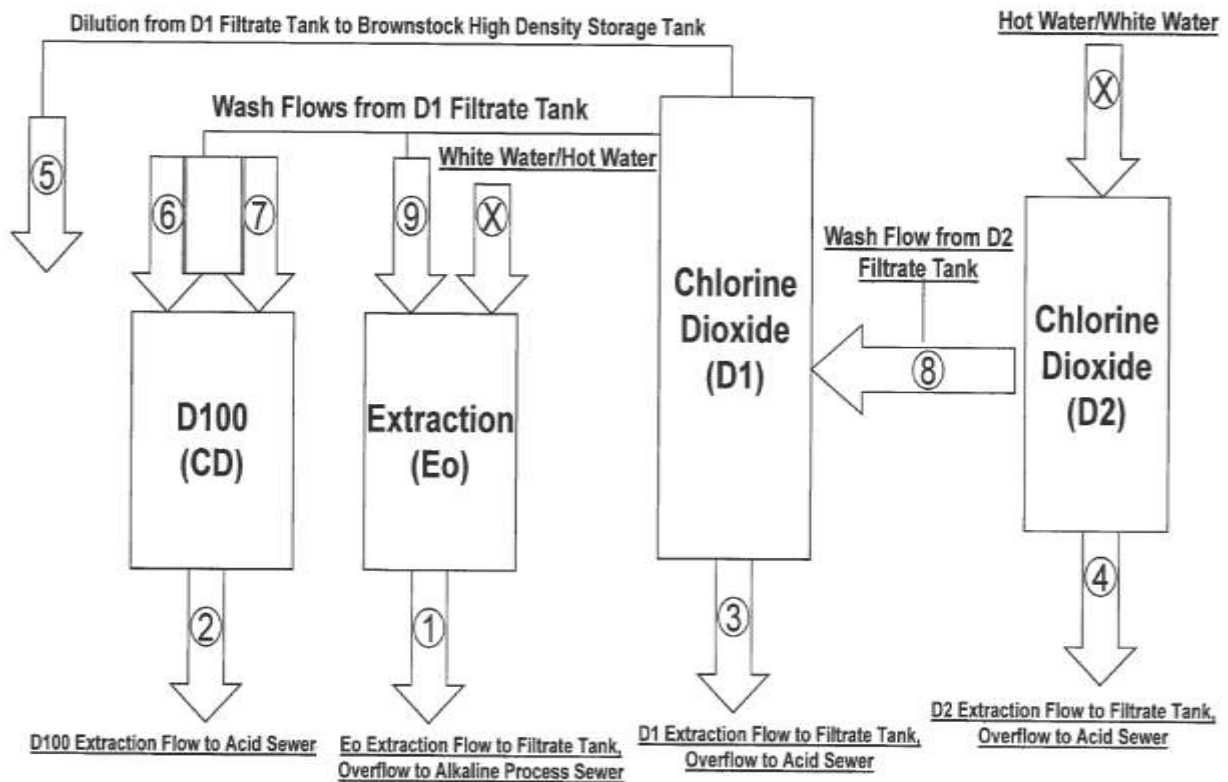
*Contact the Mississippi Office of Pollution Control Laboratory for information on most recent edition(s) of methods manual.

**Chronic WET monitoring shall be performed once per six months for the life of the

permit as specified in Part I.A.10 of this permit.

*****Hot-dry months shall encompass May through October. Cold-wet months shall encompass November through April.**

Bleach Plant – Outfall 003 Flow Totalizer



Stage 1 (D100) – flow is read from flowmeter number 2.

Stage 2 (Eo) – flow is calculated by subtracting internal reuse flows from flowmeter number 1.

Stage 3 (D1) – D1 flow is calculated by subtracting the flows from flowmeters 5, 6, 7, and 9 from flowmeter number 3.

Stage 4 (D2) – D2 flow is calculated by subtracting the flow from flowmeter 8 from the flow from flowmeter number 4.

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