



Alabama Department of Environmental Management
adem.alabama.gov

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Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

July 12, 2022

STEVE WEBB
MILL MANAGER
INTERNATIONAL PAPER COMPANY – PINE HILL CONTAINERBOARD MILL
PO BOX 250
PINE HILL, AL 36769

RE: **DRAFT PERMIT MODIFICATION**
NPDES PERMIT NUMBER AL0002674

Dear Mr. Webb:

Transmitted herein is a draft of the referenced permit modification.

We would appreciate your comments on the permit within **30 days** of the date of this letter. Please direct any comments of a technical or administrative nature to the undersigned.

By copy of this letter and the draft permit, we are also requesting comments within the same time frame from EPA.

Our records indicate that you have utilized the Department's web-based electronic environmental (E2) reporting system for submittal of discharge monitoring reports (DMRs). The Department transitioned from the E2 Reporting System to the Alabama Environmental Permitting and Compliance System (AEPACS) for the submittal of DMRs on November 15, 2021. AEPACS is an electronic system that allows facilities to apply for and maintain permits as well as submit other required applications, registrations, and certifications. In addition, the system allows facilities to submit required compliance reports or other information to the Department. The Department has used the E2 User account information to set up a similar User Profile in AEPACS based on the following criteria:

1. The user has logged in to E2 since October 1, 2019; and
2. The E2 user account is set up using a unique email address.

E2 users that met the above criteria will only need to establish an ADEM Web Portal account (<https://prd.adem.alabama.gov/awp>) under the same email address as their E2 account to have the same permissions in AEPACS as they did in E2. They will also automatically be linked to the same facilities they were in E2.

The Alabama Department of Environmental Management encourages you to voluntarily consider pollution prevention practices and alternatives at your facility. Pollution Prevention may assist you in complying with effluent limitations, and possibly reduce or eliminate monitoring requirements.

If you have questions regarding this permit or monitoring requirements, please contact Scott Jackson by e-mail at scott.jackson@adem.alabama.gov or by phone at (334) 394-4366.

Sincerely,

A handwritten signature in black ink, appearing to read "SR", is written over a circular stamp.

Scott Ramsey, Chief
Industrial Section
Industrial/Municipal Branch
Water Division

Enclosure: Draft Permit

pc via website: Montgomery Field Office
EPA Region IV
U.S. Fish & Wildlife Service
AL Historical Commission
Advisory Council on Historic Preservation
Department of Conservation and Natural Resources

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)



Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: INTERNATIONAL PAPER COMPANY - PINE HILL CONTAINERBOARD MILL

FACILITY: INTERNATIONAL PAPER COMPANY - PINE HILL CONTAINERBOARD MILL
7600 STATE HIGHWAY 10 WEST
PINE HILL, ALABAMA 36769

PERMIT NUMBER: AL0002674

RECEIVING WATERS: DSN001 – DSN004, DSN006 – DSN007: ALABAMA RIVER (CLAIBORNE LAKE)
DSN005: DUNNS CREEK

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1388 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-17, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.

ISSUANCE DATE: JUNE 28, 2018

EFFECTIVE DATE: JULY 01, 2018

EXPIRATION DATE: JUNE 30, 2023

MODIFICATION ISSUED DATE:

MODIFICATION EFFECTIVE DATE:

Draft

PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

DSN0011: Process wastewaters from pulp and paperboard production, landfill leachate, sanitary wastewaters, non-contact cooling water, and stormwater runoff. 3/ 4/

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency ²	Sample Type ¹	Seasonal
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	13500 Monthly Average	20250 Maximum Daily	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	May, Jun, Jul, Aug, Sep, Oct
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	19906 Monthly Average	29859 Maximum Daily	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	Jan, Feb, Mar, Apr, Nov, Dec
BOD, 5-Day (20 Deg. C) 5/ (00310) Effluent Net Value	*****	0 Maximum Daily	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	3X Weekly test	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	17572 Monthly Average	35104 Maximum Daily	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	All Months
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	Apr, May, Jun, Jul, Aug, Sep, Oct

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- 1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.
- 2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.
- 3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.
- 4/ From June 1 to October 31, the permittee shall only discharge between the hours 9:00 a.m. and 9:00 p.m. when the 48-hour mean flow reported for Millers Ferry is less than 15,000 CFS, unless otherwise authorized by the Department. Discharge may occur only when effluent release will not cause the in-stream dissolved oxygen to fall below 5.0 mg/l as determined in accordance with Part IV.D of this permit.
- 5/ To show compliance with the equation in Part IV.D.5 of the permit, the permittee will be required to report the net BOD5 value, which will be determined by subtracting the calculated allowable loading from the measured BOD5 value. Values of less than or equal to zero will be considered in compliance. The permittee shall report *9 on the discharge monitoring report if the equation does not apply at any point during a monitoring period.

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

DSN0011 (continued): Process wastewaters from pulp and paperboard production, landfill leachate, sanitary wastewaters, non-contact cooling water, and stormwater runoff. 3/ 4/

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency ²	Sample Type ¹	Seasonal
Nitrogen, Kjeldahl Total (As N) (00625) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	Apr, May, Jun, Jul, Aug, Sep, Oct
Nitrite Plus Nitrate Total I Det. (As N) (00630) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	Apr, May, Jun, Jul, Aug, Sep, Oct
Phosphorus, Total (As P) (00665) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	Apr, May, Jun, Jul, Aug, Sep, Oct
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Continuous	Totalizer	All Months
Certification - River Monitoring 5/ (51946) Effluent Gross Value	*****	*****	*****	*****	*****	0 Maximum Daily	Yes=0;No= 1	Monthly	Not Applicable	Jun, Jul, Aug, Sep, Oct

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- 1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.
- 2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.
- 3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.
- 4/ See Part IV.B for Stormwater Measurement and Sampling Requirements.
- 5/ The permittee shall report a "0" to indicate compliance with the reporting requirements found at Part IV.D.10

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

DSN001Q: Process wastewaters from pulp and paperboard production, landfill leachate, sanitary wastewaters, non-contact cooling water, and stormwater runoff. 3/

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency ²	Sample Type ¹	Seasonal
Pentachlorophenol (39032) 4/ Effluent Gross Value	*****	2.38 Maximum Daily	lbs/day	*****	*****	*****	*****	Quarterly	Composite	All Months
Trichlorophenol (81848) 4/ Effluent Gross Value	*****	1.76 Maximum Daily	lbs/day	*****	*****	*****	*****	Quarterly	Composite	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- 1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.
- 2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.
- 3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.
- 4/ In lieu of monitoring for these parameters, the permittee may certify non-use of chlorophenolic containing compounds according to the requirements at 40 CFR 430.105 and 40 CFR 430.124 by entering *9 on the discharge monitoring report.

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

DSN001Y: Process wastewaters from pulp and paperboard production, landfill leachate, sanitary wastewaters, non-contact cooling water, and stormwater runoff. 3/

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency ²	Sample Type ¹	Seasonal
Toxicity, Ceriodaphnia Acute 4/ (61425) Effluent Gross Value	*****	0 Maximum Daily	pass=0;fail=1	*****	*****	*****	*****	Annually	Grab	All Months
Toxicity, Pimephales Acute 4/ (61427) Effluent Gross Value	*****	0 Maximum Daily	pass=0;fail=1	*****	*****	*****	*****	Annually	Grab	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- 1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.
- 2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.
- 3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.
- 4/ See Part IV.C for Toxicity Testing Requirements.
- 5/ The IWC listed in Part IV.C.1.a.(1) shall apply until the new diffuser is installed and operational. The Permittee shall notify the Department in writing when the new diffuser is installed and operational. After the notification has been received by the Department, the IWC listed in Part IV.C.1.a.(2) shall apply.

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

DSN002S: Leachate from solid waste landfill and storm water from landfill site. 3/

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency ²	Sample Type ¹	Seasonal
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	Semi-Annually	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	24-Hr Composite	All Months
Iron Total Recoverable (00980) 4/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum	mg/l	Semi-Annually	24-Hr Composite	All Months
Zinc Total Recoverable (01094) 4/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum	mg/l	Semi-Annually	24-Hr Composite	All Months
Manganese, Total Recoverable 4/ (11123) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum	mg/l	Semi-Annually	24-Hr Composite	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-Annually	Instantaneous	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

- 1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.
- 2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.
- 3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.
- 4/ For the purposes of compliance with this permit, "Total" and "Total Recoverable" shall be considered equivalent.

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

DSN003Y – DSN007Y: Stormwater associated with industrial activity. 3/ 4/ 5/ 6/

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency ²	Sample Type ¹	Seasonal
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	(Report) Monthly Average	(Report) Maximum Daily	mg/l	Annually	Grab	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	Annually	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	All Months
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15.0 Maximum Daily	mg/l	Annually	Grab	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Annually	Estimate	All Months

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

DEBRIS IS DEFINED AS WOODY MATERIAL SUCH AS BARK, TWIGS, BRANCHES, HEARTWOOD, OR SAPWOOD THAT WILL NOT PASS THROUGH A 2.54 CM (1.0 INCH) DIAMETER ROUND OPENING.

- 1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.
- 2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation
- 3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.
- 4/ See Part IV.B for Stormwater Measurement and Sampling Requirements
- 5/ Monitoring is only required at DSN003 and DSN006 as these are considered representative outfalls. No monitoring is required at DSN004, DSN005, and DSN007.
- 6/ At least one sampling point must be selected so as to measure the influence of stormwater runoff from any sawdust, chip, or wood refuse piles on site.

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit.

2. Test Procedures

For the purpose of reporting and compliance, permittees shall use one of the following procedures:

a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance; however, should EPA approve a method with a lower minimum level during the term of this permit the permittee shall use the newly approved method.

b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit using the most sensitive EPA approved method. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures A and B above shall be reported on the permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

3. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The facility name and location, point source number, date, time and exact place of sampling;
- b. The name(s) of person(s) who obtained the samples or measurements;
- c. The dates and times the analyses were performed;
- d. The name(s) of the person(s) who performed the analyses;
- e. The analytical techniques or methods used, including source of method and method number; and
- f. The results of all required analyses.

4. Records Retention and Production

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 the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records shall not be submitted unless requested.

All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

5. Monitoring Equipment and Instrumentation

All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. The permittee shall develop and maintain quality assurance procedures to ensure proper operation and maintenance of all equipment and instrumentation. The quality assurance procedures shall include the proper use, maintenance, and installation, when appropriate, of monitoring equipment at the plant site.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements

- a. The permittee shall conduct the required monitoring in accordance with the following schedule:

MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.

QUARTERLY MONITORING shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring may be done anytime during the quarter, unless restricted elsewhere in this permit, but it should be submitted with the last DMR due for the quarter, i.e., (March, June, September and December DMR's).

SEMIANNUAL MONITORING shall be conducted at least once during the period of January through June and at least once during the period of July through December. The permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be submitted with the last DMR for the month of the semiannual period, i.e. (June and December DMR's).

ANNUAL MONITORING shall be conducted at least once during the period of January through December. The permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be submitted with the December DMR.

- b. The permittee shall submit discharge monitoring reports (DMRs) on the forms provided by the Department and in accordance with the following schedule:

REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING shall be submitted on a **monthly** basis. The first report is due on the **28th day of August 2018**. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF QUARTERLY TESTING shall be submitted on a **quarterly** basis. The first report is due on the **28th day of October 2018**. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF SEMIANNUAL TESTING shall be submitted on a semiannual basis. The reports are due on the 28th day of **JANUARY** and the 28th day of **JULY**. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF ANNUAL TESTING shall be submitted on an annual basis. The first report is due on the 28th day of **JANUARY**. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

- c. Except as allowed by Provision I.C.1.c.(1) or (2), the permittee shall submit all Discharge Monitoring Reports (DMRs) required by Provision I.C.1.b electronically.

(1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's electronic system (this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the date specified in Provision I.C.1.b, unless otherwise directed by the Department.

If the Department's electronic system is down on the 28th day of the month in which the DMR is due or is down for an extended period of time, as determined by the Department, when a DMR is required to be submitted, the permittee may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within 5 calendar days of the Department's electronic system resuming operation, the permittee shall enter the data into the Department's electronic system, unless an alternate timeframe is approved by the Department. A comment should be included on the electronic DMR submittal verifying the original submittal date (date of the fax, copy of the dated e-mail, or hand-delivery stamped date), if applicable.

- (2) The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable.

Permittees with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The permittee shall submit the Department-approved DMR forms to the address listed in Provision I.C.1.e.

- (3) If a permittee is allowed to submit a hard copy DMR, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit.
- (4) If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A. of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR and the increased frequency shall be indicated on the DMR.
- (5) In the event no discharge from a point source identified in Provision I.A. of this permit and described more fully in the permittee's application occurs during a monitoring period, the permittee shall report "No Discharge" for such period on the appropriate DMR.

- d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear 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 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."

- e. Discharge Monitoring Reports required by this permit, the AWPCA, and the Department's Rules that are being submitted in hard copy shall be addressed to:

Alabama Department of Environmental Management
Water Division
Office of Water Services
Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail containing Discharge Monitoring Reports shall be addressed to:

Alabama Department of Environmental Management
Water Division
Office of Water Services
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2400

- f. All other correspondence and reports required to be submitted by this permit, the AWPCA, and the Department's Rules shall be addressed to:

Alabama Department of Environmental Management
Water Division

Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

Alabama Department of Environmental Management
Water Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2400

- g. If this permit is a re-issuance, then the permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.C.1.b above.

2. Noncompliance Notification

a. 24-Hour Noncompliance Reporting

The permittee shall report to the Director, within 24-hours of becoming aware of the noncompliance, any noncompliance which may endanger health or the environment. This shall include but is not limited to the following circumstances:

- (1) does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I. A. of this permit which is denoted by an "(X)";
- (2) threatens human health or welfare, fish or aquatic life, or water quality standards;
- (3) does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);
- (4) contains a quantity of a hazardous substance which has been determined may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
- (5) exceeds any discharge limitation for an effluent characteristic as a result of an unanticipated bypass or upset; and
- (6) is an unpermitted direct or indirect discharge of a pollutant to a water of the state (unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision).

The permittee shall orally report the occurrence and circumstances of such discharge to the Director within 24-hours after the permittee becomes aware of the occurrence of such discharge. In addition to the oral report, the permittee shall submit to the Director or Designee a written report as provided in Part I.C.2.c no later than five (5) days after becoming aware of the occurrence of such discharge.

- b. If for any reason, the permittee's discharge does not comply with any limitation of this permit, the permittee shall submit to the Director or Designee a written report as provided in Part I.C.2.c below, such report shall be submitted with the next Discharge Monitoring Report required to be submitted by Part I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.

- c. Any written report required to be submitted to the Director or Designee by Part I.C.2 a. or b. shall be submitted using a Noncompliance Notification Form (ADEM Form 421) available on the Department's website (<http://adem.alabama.gov/DeptForms/Form421.pdf>) and include the following information:

- (1) A description of the discharge and cause of noncompliance;
- (2) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- (3) A description of the steps taken and/or being taken to reduce or eliminate the noncomplying discharge and to prevent its recurrence.

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

The permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

2. Termination of Discharge

The permittee shall notify the Director, in writing, when all discharges from any point source(s) identified in Provision I. A. of this permit have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for modification or termination of the permit.

3. Updating Information

a. The permittee shall inform the Director of any change in the permittee's mailing address, telephone number or in the permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules, and the terms and conditions of this permit, in writing, no later than ten (10) days after such change. Upon request of the Director or his designee, the permittee shall furnish the Director with an update of any information provided in the permit application.

b. If 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 with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director or his designee may request to determine whether cause exists for modifying, revoking and re-issuing, suspending, or terminating this permit, in whole or in part, or to determine compliance with this permit.

5. Cooling Water and Boiler Water Additives

a. The permittee shall notify the Director in writing not later than thirty (30) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in a cooling or boiler system, not identified in the application for this permit, from which discharge is allowed by this permit. Notification is not required for additives that do not contain a heavy metal(s) as an active ingredient and that pass through a wastewater treatment system prior to discharge nor is notification required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the permittee. Such notification shall include:

- (1) name and general composition of biocide or chemical;
- (2) 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach;
- (3) quantities to be used;
- (4) frequencies of use;
- (5) proposed discharge concentrations; and
- (6) EPA registration number, if applicable.

b. The use of a biocide or additive containing tributyl tin, tributyl tin oxide, zinc, chromium or related compounds in cooling or boiler system(s), from which a discharge regulated by this permit occurs, is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the permit contains limits for these substances, or (2) the applicant demonstrates during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this permit or in the application for this permit or not exempted from notification under this permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

6. Permit Issued Based On Estimated Characteristics

- a. If this permit was issued based on estimates of the characteristics of a process discharge reported on an EPA NPDES Application Form 2D (EPA Form 3510-2D), the permittee shall complete and submit an EPA NPDES Application Form 2C (EPA Form 3510-2C) no later than two years after the date that discharge begins. Sampling required for completion of the Form 2C shall occur when a discharge(s) from the process(s) causing the new or increased discharge is occurring. If this permit was issued based on estimates concerning the composition of a stormwater discharge(s), the permittee shall perform the sampling required by EPA NPDES Application Form 2F (EPA Form 3510-2F) no later than one year after the industrial activity generating the stormwater discharge has been fully initiated.
- b. This permit shall be reopened if required to address any new information resulting from the completion and submittal of the Form 2C and or 2F.

E. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the discharge limitations specified in Provision I. A. in accordance with the following schedule:

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

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 the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit.

2. Best Management Practices

- a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.
- b. The permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.
- c. The permittee shall prepare, submit for approval and implement a Best Management Practices (BMP) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. Spill Prevention, Control, and Management

The permittee shall provide spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a water of the state or a publicly or privately owned treatment works. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and which shall prevent the contamination of groundwater and such containment system shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided.

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

The permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

2. Right of Entry and Inspection

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

- a. enter upon the permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- c. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
- d. sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

- a. Any bypass is prohibited except as provided in b. and c. below:
- b. A bypass is not prohibited if:
 - (1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;

- (2) It enters the same receiving stream as the permitted outfall; and
 - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.
- c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:
- (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There are 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 judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and
 - (3) The permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the permittee is granted such authorization, and the permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.
- d. The permittee has the burden of establishing that each of the conditions of Provision II.C.1.b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.
2. Upset
- a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:
 - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and
 - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that (i) an upset occurred; (ii) the permittee can identify the specific cause(s) of the upset; (iii) the permittee's facility was being properly operated at the time of the upset; and (iv) the permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.
 - b. The permittee has the burden of establishing that each of the conditions of Provision II. C.2.a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I.A. of this permit.

D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES

1. Duty to Comply
 - a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
 - b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a permittee in an enforcement action.
 - c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.
 - d. The permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.
 - e. Nothing in this permit shall be construed to preclude and negate the permittee's responsibility or liability to apply for, obtain, or comply with other ADEM, Federal, State, or Local Government permits, certifications, licenses, or other approvals.

2. Removed Substances

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.

3. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. Compliance with Statutes and Rules

a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Blvd., Montgomery, AL 36130.

b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws, FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE

1. Duty to Reapply or Notify of Intent to Cease Discharge

a. If the permittee intends to continue to discharge beyond the expiration date of this permit, the permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the permittee does not intend to continue discharge beyond the expiration of this permit, the permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.

b. Failure of the permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

a. The permittee shall apply for a permit modification at least 180 days in advance of any facility expansion, production increase, process change, or other action that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant such that existing permit limitations would be exceeded or that could result in an additional discharge point. This requirement applies to pollutants that are or that are not subject to discharge limitations in this permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.

b. The permittee shall notify the Director as soon as it is known or there is reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(a) one hundred micrograms per liter;

(b) two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dini-trophenol; and one milligram per liter for antimony;

(c) five times the maximum concentration value reported for that pollutant in the permit application; or

(2) 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 which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(a) five hundred micrograms per liter;

(b) one milligram per liter for antimony;

- (c) ten times the maximum concentration value reported for that pollutant in the permit application.

3. Transfer of Permit

This permit may not be transferred or the name of the permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership or control of the permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. Permit Modification and Revocation

- a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:

- (1) If cause for termination under Provision II, E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;
- (2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or
- (3) If modification or revocation and reissuance is requested by the permittee and cause exists, the Director may grant the request.

- b. This permit may be modified during its term for cause, including but not limited to, the following:

- (1) If cause for termination under Provision II, E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;
- (2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
- (3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;
- (4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;
- (5) Errors in calculation of discharge limitations or typographical or clerical errors were made;
- (6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;
- (8) To agree with a granted variance under 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;
- (9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;
- (10) When required by the reopener conditions in this permit;
- (11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);
- (12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;
- (13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or

- (14) When requested by the permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules.

5. Permit Termination

This permit may be terminated during its term for cause, including but not limited to, the following:

- a. Violation of any term or condition of this permit:
- b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the permittee's misrepresentation of any relevant facts at any time:
- c. Materially false or inaccurate statements or information in the permit application or the permit:
- d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge:
- e. The permittee's discharge threatens human life or welfare or the maintenance of water quality standards:
- f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge:
- g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the permittee:
or
- h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. Permit Suspension

This permit may be suspended during its term for noncompliance until the permittee has taken action(s) necessary to achieve compliance.

7. Request for Permit Action Does Not Stay Any Permit Requirement

The filing of a request by the permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term or condition.

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the permittee and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit, or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic pollutant effluent standard or prohibition and the permittee shall be notified of such modification. If this permit has not been modified to conform to the toxic pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

G. DISCHARGE OF WASTEWATER GENERATED BY OTHERS

The discharge of wastewater, generated by any process, facility, or by any other means not under the operational control of the permittee or not identified in the application for this permit or not identified specifically in the description of an outfall in this permit is not authorized by this permit.

PART III OTHER PERMIT CONDITIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

2. False Statements

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties as provided by the AWPCA.

3. Permit Enforcement

a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA and as such any terms, conditions, or limitations of the permit are enforceable under state and federal law.

b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes.

(1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;

(2) An action for damages;

(3) An action for injunctive relief; or

(4) An action for penalties.

c. If the permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the permittee has made a timely and complete application for reissuance of the permit:

(1) initiate enforcement action based upon the permit which has been continued;

(2) issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(3) reissue the new permit with appropriate conditions; or

(4) take other actions authorized by these rules and AWPCA.

4. Relief from Liability

Except as provided in Provision II.C.1 (Bypass) and Provision II.C.2 (Upset), nothing in this permit shall be construed to relieve the permittee of civil or criminal liability under the AWPCA or FWPCA for noncompliance with any term or condition of this permit.

B. 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 under Section 311 of the FWPCA, 33 U.S.C. Section 1321.

C. PROPERTY AND OTHER RIGHTS

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 persons or property or invasion of other private rights, trespass, or any infringement of federal, state, or local laws or regulations.

nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the state or of the United States.

D. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 1975, Section 22-22-9(c), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential.

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.
2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.
3. Construction has begun when the owner or operator has:
 - a. begun, or caused to begin as part of a continuous on-site construction program:
 - (1) any placement, assembly, or installation of facilities or equipment; or
 - (2) significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - b. entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.

F. COMPLIANCE WITH WATER QUALITY STANDARDS

1. On the basis of the permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.
2. Compliance with permit terms and conditions notwithstanding, if the permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.
3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

G. GROUNDWATER

Unless specifically authorized under this permit, this permit does not authorize the discharge of pollutants to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem and the Director may require that the Permittee undertake measures to abate any such discharge and/or contamination.

H. DEFINITIONS

1. Average monthly discharge limitation - 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 (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
2. Average weekly discharge limitation - 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 (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

3. Arithmetic Mean – means the summation of the individual values of any set of values divided by the number of individual values.
4. AWPCA - means the Alabama Water Pollution Control Act.
5. BOD – means the five-day measure of the pollutant parameter biochemical oxygen demand.
6. Bypass - means the intentional diversion of waste streams from any portion of a treatment facility.
7. CBOD – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. Daily discharge - means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
9. Daily maximum - means the highest value of any individual sample result obtained during a day.
10. Daily minimum - means the lowest value of any individual sample result obtained during a day.
11. Day - means any consecutive 24-hour period.
12. Department - means the Alabama Department of Environmental Management.
13. Director - means the Director of the Department.
14. Discharge - means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other wastes into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(8).
15. Discharge Monitoring Report (DMR) - means the form approved by the Director to accomplish reporting requirements of an NPDES permit.
16. DO – means dissolved oxygen.
17. 8HC – means 8-hour composite sample, including any of the following:
 - a. The mixing of at least 5 equal volume samples collected at constant time intervals of not more than 2 hours over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
 - b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
18. EPA - means the United States Environmental Protection Agency.
19. FC – means the pollutant parameter fecal coliform.
20. Flow – means the total volume of discharge in a 24-hour period.
21. FWPCA - means the Federal Water Pollution Control Act.
22. Geometric Mean – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
23. Grab Sample – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
24. Indirect Discharger – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.

25. Industrial User – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category “Division D – Manufacturing” and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
26. MGD – means million gallons per day.
27. Monthly Average – means, other than for fecal coliform bacteria, the arithmetic mean of the entire composite or grab samples taken for the daily discharges collected in one month period. The monthly average for fecal coliform bacteria is the geometric mean of daily discharge samples collected in a one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.
28. New Discharger – means a person, owning or operating any building, structure, facility or installation:
 - a. from which there is or may be a discharge of pollutants;
 - b. that did not commence the discharge of pollutants prior to August 13, 1979, and which is not a new source; and
 - c. which has never received a final effective NPDES permit for dischargers at that site.
29. NH3-N – means the pollutant parameter ammonia, measured as nitrogen.
30. Permit application - means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.
31. Point source - means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
32. Pollutant - includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
33. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a “POTW”.
34. Publicly Owned Treatment Works – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
35. Receiving Stream – means the “waters” receiving a “discharge” from a “point source”.
36. 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.
37. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work’s capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
38. Solvent – means any virgin, used or spent organic solvent(s) identified in the F-Listed wastes (F001 through F005) specified in 40 CFR 261.31 that is used for the purpose of solubilizing other materials.
39. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.
40. TON – means the pollutant parameter Total Organic Nitrogen.
41. TRC – means Total Residual Chlorine.
42. TSS – means the pollutant parameter Total Suspended Solids.
43. 24HC – means 24-hour composite sample, including any of the following:
 - a. the mixing of at least 12 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;

- b. a sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
 - c. a sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
44. Upset - means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge 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.
45. Waters - means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.
46. Week - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.
47. Weekly (7-day and calendar week) Average – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

I. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision 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.

PART IV ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. BEST MANAGEMENT PRACTICES (BMP) PLAN REQUIREMENTS

1. BMP Plan

The permittee shall develop and implement a Best Management Practices (BMP) Plan which prevents, or minimizes the potential for, the release of pollutants from ancillary activities, including material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas, to the waters of the State through plant site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage.

2. Plan Content

The permittee shall prepare and implement a best management practices (BMP) plan, which shall:

- a. Establish specific objectives for the control of pollutants:
 - (1) Each facility component or system shall be examined for its potential for causing a release of significant amounts of pollutants to waters of the State due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.
 - (2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g. precipitation), or circumstances to result in significant amounts of pollutants reaching surface waters, the plan should include a prediction of the direction, rate of flow, and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.
- b. Establish specific best management practices to meet the objectives identified under paragraph a. of this section, addressing each component or system capable of causing a release of significant amounts of pollutants to the waters of the State, and identifying specific preventative or remedial measures to be implemented;
- c. Establish a program to identify and repair leaking equipment items and damaged containment structures, which may contribute to contaminated stormwater runoff. This program must include regular visual inspections of equipment, containment structures and of the facility in general to ensure that the BMP is continually implemented and effective;
- d. Prevent the spillage or loss of fluids, oil, grease, gasoline, etc. from vehicle and equipment maintenance activities and thereby prevent the contamination of stormwater from these substances;
- e. Prevent or minimize stormwater contact with material stored on site;
- f. Designate by position or name the person or persons responsible for the day to day implementation of the BMP;
- g. Provide for routine inspections, on days during which the facility is manned, of any structures that function to prevent stormwater pollution or to remove pollutants from stormwater and of the facility in general to ensure that the BMP is continually implemented and effective;
- h. Provide for the use and disposal of any material used to absorb spilled fluids that could contaminate stormwater;
- i. Develop a solvent management plan, if solvents are used on site. The solvent management plan shall include as a minimum lists of the solvents on site; the disposal method of solvents used instead of dumping, such as reclamation, contract hauling; and the procedures for assuring that solvents do not routinely spill or leak into the stormwater;
- j. Provide for the disposal of all used oils, hydraulic fluids, solvent degreasing material, etc. in accordance with good management practices and any applicable state or federal regulations;
- k. Include a diagram of the facility showing the locations where stormwater exits the facility, the locations of any structure or other mechanisms intended to prevent pollution of stormwater or to remove pollutants from stormwater, the locations of any collection and handling systems;
- l. Provide control sufficient to prevent or control pollution of stormwater by soil particles to the degree required to maintain compliance with the water quality standard for turbidity applicable to the waterbody(s) receiving discharge(s) under this permit;

- m. Provide spill prevention, control, and/or management sufficient to prevent or minimize contaminated stormwater runoff. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and shall prevent the contamination of groundwater. The containment system shall also be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided;
 - n. Provide and maintain curbing, diking or other means of isolating process areas to the extent necessary to allow segregation and collection for treatment of contaminated stormwater from process areas;
 - o. Be reviewed by plant engineering staff and the plant manager; and
 - p. Bear the signature of the plant manager.
3. Compliance Schedule
- The permittee shall have reviewed (and revised if necessary) and fully implemented the BMP plan as soon as practicable but no later than six months after the effective date of this permit.
4. Department Review
- a. When requested by the Director or his designee, the permittee shall make the BMP available for Department review.
 - b. The Director or his designee may notify the permittee at any time that the BMP is deficient and require correction of the deficiency.
 - c. The permittee shall correct any BMP deficiency identified by the Director or his designee within 30 days of receipt of notification and shall certify to the Department that the correction has been made and implemented.
5. Administrative Procedures
- a. A copy of the BMP shall be maintained at the facility and shall be available for inspection by representatives of the Department.
 - b. A log of the routine inspection required above shall be maintained at the facility and shall be available for inspection by representatives of the Department. The log shall contain records of all inspections performed for the last three years and each entry shall be signed by the person performing the inspection.
 - c. The permittee shall provide training for any personnel required to implement the BMP and shall retain documentation of such training at the facility. This documentation shall be available for inspection by representatives of the Department. Training shall be performed prior to the date that implementation of the BMP is required.
 - d. BMP Plan Modification. The permittee shall amend the BMP plan whenever there is a change in the facility or change in operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.
 - e. BMP Plan Review. The permittee shall complete a review and evaluation of the BMP plan at least once every three years from the date of preparation of the BMP plan. Documentation of the BMP Plan review and evaluation shall be signed and dated by the Plant Manager.

B. STORMWATER FLOW MEASUREMENT AND SAMPLING REQUIREMENTS

1. Stormwater Flow Measurement
- a. All stormwater samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches.
 - b. The total volume of stormwater discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for storm event(s) sampled. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event must be a minimum of 72 hours. This information must be recorded as part of the sampling procedure and records retained according to Part I.B. of this permit.

- c. The volume may be measured using flow measuring devices, or estimated based on a modification of the Rational Method using total depth of rainfall, the size of the drainage area serving a stormwater outfall, and an estimate of the runoff coefficient of the drainage area. This information must be recorded as part of the sampling procedure and records retained according to Part I.B. of this permit.
2. Stormwater Sampling
 - a. A grab sample, if required by this permit, shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable); and a flow-weighted composite sample, if required by this permit, shall be taken for the entire event or for the first three hours of the event.
 - b. All test procedures will be in accordance with part I.B. of this permit.

C. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS

1. The permittee shall perform 48-hour acute toxicity tests on the wastewater discharges required to be tested for acute toxicity by Part I of this permit.
 - a. Test Requirements, Option A (Screening Test)
 - (1) **Current Diffuser:** The samples shall be diluted, using an appropriate control water, to the Instream Waste Concentration (IWC) which is 28% effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 1-day, 10-year flow period.
 - (2) **New Diffuser:** The samples shall be diluted, using an appropriate control water, to the Instream Waste Concentration (IWC) which is 9% effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 1-day, 10-year flow period.
 - (3) Any test where survival in the effluent concentration is less than 90% and statistically lower than the control indicates acute toxicity and constitutes noncompliance with this permit.
 - b. General Test Requirements:
 - (1) A grab sample shall be obtained for use in above biomonitoring tests. The holding time for each sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-012 or most current edition or another control water selected by the permittee and approved by the Department.

Effluent toxicity tests in which the control survival is less than 90% or in which the other requirements of the EPA Test Procedure are not met shall be unacceptable and the permittee shall rerun the tests as soon as practical within the monitoring period.

In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are reported with an explanation of the tests performed and results.
 - c. Reporting Requirements:
 - (1) The permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
 - (2) Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2. of this part, an effluent toxicity report containing the information in Section 2. shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month in which the tests were performed.
 - d. Additional Testing Requirements:
 - (1) If acute toxicity is indicated (noncompliance with permit limit), the permittee shall perform four additional valid acute toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall be performed once per week and shall be performed during the first four calendar weeks following the date on which the permittee became aware of the permit noncompliance and the results of these tests shall be submitted no later than 28 days following the month in which the tests were performed.

- (2) After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols/guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600R-92/081, EPA/833/B-99/022 and/or EPA/600/6-91/005F, etc.).

e. Test Methods:

- (1) The tests shall be performed in accordance with the latest edition of the "EPA Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" and shall be performed using the fathead minnow (*Pimephales promelas*) and the cladoceran (*Ceriodaphnia dubia*).

2. Effluent toxicity testing reports

The following information shall be submitted with each discharge monitoring report unless otherwise directed by the Department. The Department may at any time suspend or reinstate this requirement or may increase or decrease the frequency of submittals.

a. Introduction

- (1) Facility Name, location and county
- (2) Permit number
- (3) Toxicity testing requirements of permit
- (4) Name of receiving water body
- (5) Contract laboratory information (if tests are performed under contract)
 - (a) Name of firm
 - (b) Telephone number
 - (c) Address
- (6) Objective of test

b. Plant Operations

- (1) Discharge operating schedule (if other than continuous)
- (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection date (MGD, CFS, GPM)
- (3) Design flow of treatment facility at time of sampling

c. Source of Effluent and Dilution Water

- (1) Effluent samples
 - (a) Sampling point
 - (b) Sample collection dates and times (to include composite sample start and finish times)
 - (c) Sample collection method
 - (d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
 - (e) Sample temperature when received at the laboratory
 - (f) Lapsed time from sample collection to delivery
 - (g) Lapsed time from sample collection to test initiation

- (2) Dilution Water Samples
 - (a) Source
 - (b) Collection date(s) and time(s) (where applicable)
 - (c) Pretreatment
 - (d) Physical and chemical characteristics (pH, hardness, water temperature, alkalinity, specific conductance, etc.)
- d. Test Conditions
 - (1) Toxicity test method utilized
 - (2) End point(s) of test
 - (3) Deviations from referenced method, if any, and reason(s)
 - (4) Date and time test started
 - (5) Date and time test terminated
 - (6) Type and volume of test chambers
 - (7) Volume of solution per chamber
 - (8) Number of organisms per test chamber
 - (9) Number of replicate test chambers per treatment
 - (10) Test temperature, pH and dissolved oxygen as recommended by the method (to include ranges)
 - (11) Feeding frequency, and amount and type of food
 - (12) Light intensity (mean)
- e. Test Organisms
 - (1) Scientific name
 - (2) Life stage and age
 - (3) Source
 - (4) Disease treatment (if applicable)
- f. Quality Assurance
 - (1) Reference toxicant utilized and source
 - (2) Date and time of most recent acute reference toxicant test(s), raw data, and current cusum chart(s)
 - (3) Dilution water utilized in reference toxicant test
 - (4) Results of reference toxicant test(s) (LC50, etc.), report concentration-response relationship and evaluate test sensitivity. The most recent reference toxicant test shall be conducted within 30-days of the routine.
 - (5) Physical and chemical methods utilized
- g. Results
 - (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate

- (2) Provide table of endpoints: LC50, NOAEC, Pass/Fail (as required in the applicable NPDES permit)
 - (3) Indicate statistical methods used to calculate endpoints
 - (4) Provide all physical and chemical data required by method
 - (5) Results of test(s) (LC50, NOAEC, Pass/Fail, etc.), report concentration-response relationship (**definitive test only**), report percent minimum significant difference (PMSD).
- h. Conclusions and Recommendations
- (1) Relationship between test endpoints and permit limits
 - (2) Action to be taken

1/ Adapted from "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", Fifth Edition, October 2002 (EPA 821-R-02-012), Section 12, Report Preparation

D. STREAM MONITORING

1. Between June 1 and October 31, the permittee shall conduct stream monitoring at station "C" mile 121.8 and evaluate Miller's Ferry Lock and Dam 48-hour mean river flows five days per discharge week.
2. Stream monitoring parameters shall be:
 - a. Dissolved oxygen and 5' depth
 - b. Water temperature
 - c. pH
3. Stream monitoring shall not be required on days that the permittee does not discharge effluent from DSN001 to the Alabama River, or on days when weather conditions or high river flows do not allow stream monitoring to be completed safely.
4. If D.O. values at station "C" (river mile 121.8) are found to be less than 5.4 mg/l, but greater than or equal to 5.0 mg/l, the permittee shall re-measure the D.O. at station "C" within two hours. If the D.O. continues to be below 5.4 mg/l the permittee shall cease discharge from DSN001 within one hour.
 - a. The permittee may continue to monitor D.O. levels at station "C" (river mile 121.8) during the discharge day until a D.O. reading of 5.4 mg/l or greater is recorded, at which time discharge from DSN001 may resume for the remainder of the discharge day in accordance with all other applicable permit limitations.OR
 - b. Continue to discharge from DSN001 and conduct a river survey in accordance with specific condition 8 of this section.
5. During periods of time when the dissolved oxygen level in the receiving stream as measured at the five (5) foot depth at station "C" (river mile 121.8) is less than 5.3 mg/l the maximum discharge of BOD5 from DSN001 shall be governed by the following equation, to a level not to exceed that limit in Part I of this permit.
$$\text{Maximum BOD (lbs/day)} = 2.04 (Q) (D.O. - 5).$$

Where Q = 24-hour flow CFS determined for Miller's Ferry for the prior day and
D.O. = Dissolved Oxygen in mg/l at the five (5) foot depth, as measured at station "C" (river mile 121.8)
6. In the event that the permittee measures D.O. values less than 5.0 mg/l at station "C" (river mile 121.8) after discharging at DSN001 has commenced, the permittee shall discontinue discharging from DSN001 within one hour and until measured D.O. values at station "C" (river mile 121.8) exceed 5.0 mg/l.
7. For the period from June 1 to October 31, any discharge week where the mean 48-hour Alabama River flow falls below 15000 CFS as measured at Miller's Ferry Lock and Dam, the permittee shall conduct a river survey in accordance with specific condition 8 of this permit.

8. River surveys shall constitute sampling at the following locations and shall include the parameters specified in 8a below. River survey sampling locations shall be Stations "A" (river mile 124.6), "B" (river mile 123.3), "C" (river mile 121.8), "1" (river mile 121.2), "2" (river mile 120.5), "3" (river mile 118.2), "4" (river mile 116.0), and "5" (river mile 112.0). If the measured D.O. value at station "5" (river mile 112.0) is less than 5.4 mg/l, the permittee shall continue to survey river stations "6" (river mile 107.8), "7" (river mile 104.8), "8" (river mile 100.2), "9" (river mile 96.0), and "10" (river mile 91.1), or until a measured D.O. reading of 5.4 mg/l or greater is observed, or until a recovery 0.1 mg/l D.O. is recorded.
 - a. Stream monitoring parameters shall be:
 1. Dissolved oxygen at the 5' depth
 2. Water temperature
 3. pH
 4. BOD5
9. For any discharge week, June 1 to October 31, which the mean 48-hour Alabama River flow falls below 6000 CFS as measured at Millers Ferry Lock and Dam for one or more days on which it is evaluated, the permittee shall conduct two river surveys in accordance with specific condition 8 of this permit.
10. Data from monitoring shall be reported to the Department not later than 28 days following the last day of the reporting period. The report shall be submitted electronically.
11. Definitions
 - a. Permit Day: 0900 to 0900
 - b. Discharge Day: June 1 to October 31 is 0900 to 2100 when the Alabama River 48 hour mean is less than 15000 CFS
 - c. Discharge Week: Sunday 0001 to Saturday 2359
 - d. Stream Monitoring Season: June 1 to October 31
 - e. DSN001: The permittee discharge point into the Alabama River
 - f. Station "C": Alabama river mile 121.8, including the International Paper oil dock and all viable sample points at mile 121.8

E. COOLING WATER INTAKE STRUCTURE (CWIS) REQUIREMENTS

1. The cooling water intake structure used by the permittee has been evaluated using available information. At this time, the Department has determined that the cooling water intake structure represents the best technology available (BTA) to minimize adverse environmental impact in accordance with Section 316(b) of the Federal Clean Water Act (33 U.S.C. section 1326).
2. The permittee shall submit the following information at least 180 days prior to expiration of the permit:
 - a. design intake flow of the CWIS
 - b. percentage of intake flow, based on highest monthly average in last 5 years, used for cooling purposes:
 - c. an estimate of the intake flow reduction at the facility based upon the use of a 100 percent (or some lesser percentage) closed-cycle re-circulating cooling water system compared to a conventional once-through cooling water system
 - d. through screen design intake flow velocity
 - e. any impingement and entrainment data that may have been collected based on the operation of the facility's CWIS, collected since the effective date of this NPDES permit
 - f. a detailed description of any changes in the operations of the CWIS, or changes in the type of technologies used at the CWIS such as screens or other technologies affecting the rates of impingement and/or entrainment of fish and shellfish

3. The permittee is required to operate and maintain the CWIS in a manner that minimizes impingement and entrainment levels. Typical activities that may satisfy this requirement include but are not limited to:
 - a. Routine inspection, maintenance, and replacement prior to the end of the useful service life of mechanical equipment associated with the CWIS;
 - b. Underwater inspection of critical components required to maintain functionality and biological effectiveness; or
 - c. Velocity monitoring and maintaining or achieving an intake velocity of less than 0.5 ft/s.
4. Nothing in this Permit authorizes take for the purposes of a facility compliance with the Endangered Species Act. Under the Endangered Species Act, take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct, of endangered or threatened species.



Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

FACT SHEET

**APPLICATION FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE POLLUTANTS TO WATERS OF
THE STATE OF ALABAMA**

Date: July 11, 2022

Prepared By: Scott Jackson

NPDES Permit No. AL0002674

1. Name and Address of Applicant:

International Paper Company - Pine Hill Containerboard Mill
P O Box 250
Pine Hill, AL 36769)

2. Name and Address of Facility:

International Paper Company - Pine Hill Containerboard Mill
7600 State Highway 10 West
Pine Hill, AL 36769

3. Description of Applicant's Type of Facility and/or Activity Generating the Discharge:

Individual Permit - Standard

4. Applicant's Receiving Waters

<u>Receiving Waters</u>	<u>Classification</u>
Alabama River	Fish & Wildlife
Dunns Creek	Fish & Wildlife

For the Outfall latitude and longitude, see the permit application.

5. Permit Conditions:

See attached Rationale and Draft Permit.

6. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Alabama Department of Environmental Management proposes to issue this NPDES permit subject to the limitations and special conditions outlined above. This determination is tentative.

Interested persons are invited to submit written comments on the draft permit to the following address:



Jeffery W. Kitchens, Chief
ADEM-Water Division
1400 Coliseum Blvd
[Mailing Address: Post Office Box 301463; Zip 36130-1463]
Montgomery, Alabama 36110-2400
(334) 271-7823
water-permits@adem.alabama.gov

All comments received prior to the closure of the public notice period (see public notice for date) will be considered in the formulation of the final determination with regard to this permit.

b. Public Hearing

A written request for a public hearing may be filed within the public notice period and must state the nature of the issues proposed to be raised in the hearing. A request for a hearing should be filed with the Department at the following address:

Jeffery W. Kitchens, Chief
ADEM-Water Division
1400 Coliseum Blvd
[Mailing Address: Post Office Box 301463; Zip 36130-1463]
Montgomery, Alabama 36110-2400
(334) 271-7823
water-permits@adem.alabama.gov

The Director shall hold a public hearing whenever it is found, on the basis of hearing requests, that there exists a significant degree of public interest in a permit application or draft permit. The Director may hold a public hearing whenever such a hearing might clarify one or more issues involved in the permit decision. Public notice of such a hearing will be made in accordance with ADEM Admin. Code r. 335-6-6-.21.

c. Issuance of the Permit

All comments received during the public comment period shall be considered in making the final permit decision. At the time that any final permit decision is issued, the Department shall prepare a response to comments in accordance with ADEM Admin. Code r. 335-6-6-.21. **The permit record, including the response to comments, will be available to the public via the eFile System <http://app.adem.alabama.gov/eFile/> or an appointment to review the record may be made by writing the Permits and Services Division at the above address.**

Unless a request for a stay of a permit or permit provision is granted by the Environmental Management Commission, the proposed permit contained in the Director's determination shall be issued and effective, and such issuance will be the final administrative action of the Alabama Department of Environmental Management.

d. Appeal Procedures

As allowed under ADEM Admin. Code chap. 335-2-1, any person aggrieved by the Department's final administrative action may file a request for hearing to contest such action. Such requests should be received by the Environmental Management Commission within thirty days of issuance of the permit. Requests should be filed with the Commission at the following address:

Alabama Environmental Management Commission
1400 Coliseum Blvd
[Mailing Address: Post Office Box 301463; Zip 36130-1463]
Montgomery, Alabama 36110-2400

All requests must be in writing and shall contain the information provided in ADEM Admin. Code r. 335-2-1-.04.

ADEM PERMIT RATIONALE

PREPARED DATE: July 8, 2022

PREPARED BY: Scott Jackson

Permittee Name: International Paper Company - Pine Hill Containerboard Mill

Facility Name: International Paper Company - Pine Hill Containerboard Mill

Permit Number: AL0002674

PERMIT IS MODIFICATION

DISCHARGE SERIAL NUMBERS & DESCRIPTIONS:

DSN001: Process wastewaters from pulp and paperboard production, landfill leachate, sanitary wastewaters, non-contact cooling water, and stormwater runoff

INDUSTRIAL CATEGORY:

40 CFR 430 – The Pulp, Paper, and Paperboard Point Source Category

40 CFR 430.32, 430.33, 430.34 Subpart C – Unbleached Kraft Subcategory

40 CFR 430.102, 430.104, 430.105 Subpart J – Secondary Fiber Non-Deink Subcategory

MAJOR: Y

STREAM INFORMATION (DSN001):

Receiving Stream: Alabama River (Claiborne Lake)

Classification: Fish & Wildlife

River Basin: Alabama River Basin

7Q10: 4387 cfs

7Q2: 6386 cfs

1Q10: 3290 cfs

Annual Average Flow: 30642 cfs

303(d) List: YES

Impairment: Metals (Mercury)

TMDL: NO

DISCUSSION:

The facility is a combined unbleached kraft and semi-chemical pulp and paperboard mill. Paper Machine #1 produces unbleached Kraft linerboard from unbleached Kraft pulp, controlled soda semi-chemical (CSSC) pulp, and non-deinked secondary fiber (recycle pulp). Paper Machine #2 produces unbleached corrugating medium from CSSC pulp and recycle pulp.

ADEM Administrative Rule 335-6-10-.12 requires applicants to new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social development in the area in which the waters are located. The application submitted by the facility is not for a discharge to a Tier II water body. Therefore, anti-degradation requirements do not apply.

DSN0011: Process wastewaters from pulp and paperboard production, landfill leachate, sanitary wastewaters, non-contact cooling water, and stormwater runoff

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
	Monthly Average	Maximum Daily		*****	*****	*****					
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	13500	20250	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	May, Jun, Jul, Aug, Sep, Oct	WQBEL
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	19906	29859	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	Jan, Feb, Mar, Apr, Nov, Dec	WQBEL
BOD, 5-Day (20 Deg. C) (00310) Effluent Net Value	*****	0	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	All Months	WQBEL
pH (00400) Effluent Gross Value	*****	*****	*****	6.0	*****	9.0	S.U.	3X Weekly test	Grab	All Months	EGL
Solids, Total Suspended (00530) Effluent Gross Value	17572	35104	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	All Months	EGL
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	Apr, May, Jun, Jul, Aug, Sep, Oct	BPJ
Nitrogen, Kjeldahl Total (As N) (00625) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	Apr, May, Jun, Jul, Aug, Sep, Oct	BPJ
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	Apr, May, Jun, Jul, Aug, Sep, Oct	BPJ
Phosphorus, Total (As P) (00665) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	Apr, May, Jun, Jul, Aug, Sep, Oct	BPJ
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Continuous	Totalizer	All Months	BPJ
Certification - River Monitoring (51946) Effluent Gross Value	*****	*****	*****	*****	*****	0	Yes=0; No=1	Monthly	Not Applicable	Jun, Jul, Aug, Sep, Oct	WQBEL

DSN001Q: Process wastewaters from pulp and paperboard production, landfill leachate, sanitary wastewaters, non-contact cooling water, and stormwater runoff

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
	*****	Maximum Daily		*****	*****	*****					
Pentachlorophenol (39032) Effluent Gross Value	*****	2.38	lbs/day	*****	*****	*****	*****	Quarterly	Composite	All Months	EGL
Trichlorophenol (81848) Effluent Gross Value	*****	1.76	lbs/day	*****	*****	*****	*****	Quarterly	Composite	All Months	EGL

DSN001Y: Process wastewaters from pulp and paperboard production, landfill leachate, sanitary wastewaters, non-contact cooling water, and stormwater runoff

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Toxicity, Ceriodaphnia Acute (61425) Effluent Gross Value	*****	0 Maximum Daily	pass=0;fail=1	*****	*****	*****	*****	Annually	Grab	All Months	WQBEL
Toxicity, Pimephales Acute (61427) Effluent Gross Value	*****	0 Maximum Daily	pass=0;fail=1	*****	*****	*****	*****	Annually	Grab	All Months	WQBEL

*Basis for Permit Limitation

- BPJ – Best Professional Judgment
- WQBEL – Water Quality Based Effluent Limits
- EGL – Federal Effluent Guideline Limitations
- 303(d) – 303(d) List of Impaired Waters
- TMDL – Total Maximum Daily Load Requirements

Discussion

The facility has applied for a modification of their existing NPDES permit. The facility submitted a request for review of the Alabama River water quality model and a request for review of the Alabama River CORMIX model. The only revisions are taking place at Outfall DSN001. The facility is not requesting change to permit limitations or monitoring requirements for any other outfall. A summary of the changes to the below limitations is provided in Attachment A.

Water Quality Based Effluent Limits (WOBEL)

A review of the submitted Waste Load Allocation (WLA) model and CORMIX analysis were performed on the discharge from this facility (see attached). The following changes are being made as a result of the review:

Biochemical Oxygen Demand (5-Day)

The current permit lists four seasonal monitoring limitations for BOD. This modification will reduce the seasonal monitoring for BOD to two seasons as defined below. The WLA model yielded an average value of 13,500 lbs/day for the summer season (May-October) and an average value of 19,906 lbs/day for the winter season (November-April). The daily maximums for each season were calculated by multiplying the monthly average by 1.5 based on BPJ.

<u>Monthly Average (lbs/day)</u>	<u>Daily Maximum (lbs/day)</u>	<u>Season</u>
13,500	20,250	May-October
19,906	29,859	November-April

The updated limitations from the water quality model remain more stringent than the effluent guideline-based limitations and shall be applied in this modification.

The permit language regarding compliance with the BOD equation in Part IV.D.5 of the permit will remain without any changes.

Toxicity

The facility is replacing its current multi-port diffuser with a new multi-port diffuser. Based on Department protocol for Whole Effluent Toxicity (WET) determination, acute toxicity using the IQ10 applicable at the edge of the zone of initial dilution (ZID) was employed. The CORMIX review performed by the Department's Water Quality section has determined that an Instream Waste Concentration (IWC) of 8.1% at the ZID is appropriate. In order to be consistent with toxicity monitoring protocols, the proposed IWC has been rounded to 9%.

The facility has requested to tier limits for toxicity testing until the new diffuser is installed and operational. The current IWC of 28% shall apply until the facility notifies the Department that the new diffuser is installed and operational. Once the Department receives this notification from the facility, the IWC of 9% shall apply. Part IV.C.1.a. of the permit is being updated to include the new IWC, and a footnote has been added to Page 4 in Part I.A. of the permit.

Federal Effluent Guideline Limitations (EGL)

The facility is regulated under 40 CFR 430 Subpart C and Subpart J, which provides effluent guideline limitations for the production processes used by the facility.

Biochemical Oxygen Demand (5-Day)

As shown in the attached calculations, the effluent guidelines used to calculate BOD are 40 CFR 430.33(b) – [BCT effluent limitations for unbleached kraft-neutral sulfite semi-chemical (cross recovery) process and/or a combined unbleached kraft and semi-chemical process...], 40 CFR 430.102(a) – [BPT effluent limitations for secondary fiber non-deink facilities where paperboard from wastepaper is produced – noncorrugating medium finish subdivision (Paper Machine #1) and corrugating medium finish subdivision (Paper Machine #2)], and 40 CFR 430.105 – [New source performance standards (NSPS) for secondary fiber non-deink...corrugating medium finish subdivision].

The sum of these guideline limitations are less stringent than the water quality based limitations discussed above; therefore, the water quality based limitations will be applied in this modification.

Total Suspended Solids (TSS)

The effluent guidelines used to calculate TSS are the same subparts mentioned above for BOD. The sum of these guidelines provides the final limitations applicable to the discharge; however, the current permit limitations are more stringent than the calculated limits, and the facility has shown the ability to meet these limitations; therefore, the current limitations will be continued in this permit modification.

Pentachlorophenol* and Trichlorophenol*

As shown in the attached calculations, the effluent guidelines used to calculate Pentachlorophenol and Trichlorophenol are 40 CFR 430.34(b) – [BAT effluent limitations for unbleached kraft facilities where pulp and paper are produced using the unbleached kraft-neutral sulfite semi-chemical (cross recovery) process and/or a combined unbleached kraft and semi-chemical process...], 40 CFR 430.104(a) – BAT effluent limitations for secondary fiber non-deink facilities where paperboard from wastepaper is produced], and 40 CFR 430.105 – [New source performance standards (NSPS) for secondary fiber non-deink...corrugating medium finish subdivision].

The sum of these guidelines provides the final limitations applicable to the discharge; however, the current permit limitations are more stringent than the calculated limits, and the facility has shown the ability to meet these limitations; therefore, the current daily maximum permit limitations for Pentachlorophenol and Trichlorophenol will be continued in this permit modification.

*In lieu of monitoring for these parameters, the facility can submit an annual certification of non-use as described in 40 CFR 430.02(f).

Ammonia (as N), Flow, Nitrite + Nitrate, pH, Phosphorus, Total Kjeldahl Nitrogen (TKN)

There are no changes being made to any of these parameters at DSN001 in this modification. The current permit limitations and monitoring requirements shall remain for these parameters.

303(d) List of Impaired Waters

The receiving stream, Alabama River (Claiborne Lake), is listed on the 2022 303(d) List of Impaired Waters for Metals (Mercury). The source of this impairment is from atmospheric deposition. The facility's discharge is not expected to contribute to this impairment nor contain Mercury in any significant amounts that would affect the water quality of the receiving stream; therefore, no monitoring is being proposed for Mercury at this time.

ATTACHMENT A

Permit Limits Summary

<i>Pollutant</i>	<i>Monthly Average (lbs/day)</i>	<i>Daily Maximum (lbs/day)</i>	<i>Basis</i>
Current Permit (Subpart C & J (w/o NSPS calc.))			
BOD5 (January - April):	10,973	21,871	25% increase of Historic Water Quality model
BOD5 (May - June):	8,778	17,497	Historic Water Quality model
BOD5 (July - October):	6,583	13,123	25% decrease of Historic Water Quality model
BOD5 (November - December):	8,778	17,497	Historic Water Quality model
Total Suspended Solids	17,572	35,104	Historical Production Levels
Pentachlorophenol	-	2.38	Historical Production Levels
Trichlorophenol	-	1.76	Historical Production Levels
Modification Application Request			
BOD5 (May - October)	13,500	20,250	2022 Water Quality Model
BOD5 (November - April)	19,906	39,752	October 2021 Production Levels
Total Suspended Solids	30922	61781	October 2021 Production Levels
Pentachlorophenol	-	3.440	October 2021 Production Levels
Trichlorophenol	-	2.660	October 2021 Production Levels
Proposed Permit Limitations (w/ NSPS calc.)			
BOD5 (May - October)	13,500	20,250	2022 Water Quality Model
BOD5 (November - April)	19,906	29,859	2022 Water Quality Model
Total Suspended Solids	17,572	35,104	Current permit limits
Pentachlorophenol	-	2.38	Current permit limits
Trichlorophenol	-	1.76	Current permit limits

DSN001: Cluster Rule Calculations - 2022 Modification

40 CFR 430 - Pulp and Paper Production Point Source Category

Subpart C - Unbleached Kraft Subcategory

40 CFR Part 430.32 - Best Conventional Technology (BCT)

No. 1 Paper Machine Production	1,580.5 air dried tons/day
No. 2 Paper Machine Production	649.0 air dried tons/day
Total	4,459.0 1000 lbs/day

40 CFR 430.33(b) - BCT effluent limitations for unbleached kraft facility where pulp and paper are produced using a combined unbleached kraft and semi-chemical process, wherein the spent semi-chemical cooking liquor is burned within the unbleached kraft chemical recovery system.

Pollutant	Continuous Discharges		Cluster Limitations	
	Daily Maximum (lbs/1000 lbs product)	Monthly Average (lbs/1000 lbs product)	Daily Maximum (lbs/day)	Monthly Average (lbs/day)
BOD ₅	8	4	35672	17836
TSS	12.5	6.25	55738	27869

40 CFR 430.34(b) - BAT effluent limitations for unbleached kraft facility where pulp and paper are produced using a combined unbleached kraft and semi-chemical process, wherein the spent semi-chemical cooking liquor is burned within the unbleached kraft chemical recovery system.

Pentachlorophenol*	0.00064	-	2.85	-
Trichlorophenol*	0.00059	-	2.63	-

*These limitations do not apply if the facility submits a certification of non-use at the frequency indicated in Part I.A of the permit

Subpart J - Secondary Fiber Non-Deink Subcategory

40 CFR Part 430.102 - Best Practicable Technology (BPT) = Best Conventional Technology (BCT)

No. 1 Paper Machine	154.5 air dried tons/day 309.0 1000 lbs/day
No.2 Paper Machine	170.0 air dried tons/day 340.0 1000 lbs/day

40 CFR 430.102(a) - BPT effluent limitations for secondary fiber non-deink facility where paperboard from wastepaper is produced - noncorrugating medium finish subdivision (No. 1 Paper Machine production)

Pollutant	Continuous Discharges		Cluster Limitations	
	Daily Maximum (lbs/1000 lbs product)	Monthly Average (lbs/1000 lbs product)	Daily Maximum (lbs/day)	Monthly Average (lbs/day)
BOD ₅	3	1.5	927	464
TSS	5.0	2.5	1545	773

40 CFR 430.102(a) - BPT effluent limitations for secondary fiber non-deink facility where paperboard from wastepaper is produced - corrugating medium finish subdivision (No. 2 Paper Machine production)

BOD ₅	5.7	2.8	1938	952
TSS	9.2	4.6	3128	1564

40 CFR 430.104(a) - BAT effluent limitations for secondary fiber non-deink facility where paperboard from wastepaper is produced (No. 1 and No. 2 Paper Machines combined production)

Pentachlorophenol*	0.00087	-	0.56	-
Trichlorophenol*	0.00030	-	0.19	-

*These limitations do not apply if the facility submits a certification of non-use at the frequency indicated in Part I.A of the permit

40 CFR Part 430.105 - New Source Performance Standards (NSPS)

No.2 Paper Machine 156.0 air dried tons/day
312.0 1000 lbs/day

40 CFR 430.105 - NSPS effluent limitations for secondary fiber non-deink facility where paperboard from wastepaper is produced - corrugating medium finish subdivision (No. 2 Paper Machine production)

Pollutant	Continuous Discharges		Cluster Limitations	
	Daily Maximum (lbs/1000 lbs product)	Monthly Average (lbs/1000 lbs product)	Daily Maximum (lbs/day)	Monthly Average (lbs/day)
BOD ₅	3.9	2.1	1217	655
TSS	4.4	2.3	1373	718

40 CFR 430.105 - NSPS effluent limitations for secondary fiber non-deink facility where paperboard from wastepaper is produced - corrugating medium finish subdivision (No. 2 Paper Machine production)

Pentachlorophenol*	0.00087	-	0.27	-
Trichlorophenol*	0.00030	-	0.09	-

*These limitations do not apply if the facility submits a certification of non-use at the frequency indicated in Part I.A of the permit

Total Effluent Guidelines

Pollutant	Cluster Limitations	
	Daily Maximum (lbs/day)	Monthly Average (lbs/day)
BOD ₅	39754	19907
TSS	61783	30923
Pentachlorophenol	3.69	-
Trichlorophenol	2.92	-

WLA/Mixing Zone Summary

Waste Load Allocation Summary

Page 1

REQUEST INFORMATION

Request Number: 3850

From: Scott Jackson In Branch/Section Industrial
Date Submitted 2/11/2022 Date Required 3/13/2022 FUND Code 210
Date Permit application received by NPDES program 3/1/2022

Receiving Waterbody Alabama River (Claiborne Lake)

Previous Stream Name

Facility Name International Paper Company - Pine Hill (Name of Discharger-WQ will use to file)

Weyerhaeuser Previous Discharger Name

River Basin Alabama Outfall Latitude 31.975375 (decimal degrees)

*County Wilcox Outfall Longitude -87.459708 (decimal degrees)

Permit Number AL0002674 Permit Type Expansion and Permit Reissuance

Permit Status Active

Type of Discharger INDUSTRIAL

Do other discharges exist that may impact the model? Yes No

If yes, impacting dischargers names. Pine Hill Lagoon

Impacting dischargers permit numbers. AL0062731

Existing Discharge Design Flow 19.5 MGD
Proposed Discharge Design Flow 19.5 MGD
Note: The flow rates given should be those requested for modeling.

Comments included

Yes No

Information Verified By KDP

Year File Was Created

Response ID Number 1876

Lat/Long Method Arcview

12 Digit HUC Code 031502030805

Use Classification F&W

Site Visit Completed? Yes No

Date of Site Visit 4/27/2022

Waterbody Impaired? Yes No

Date of WLA Response 6/3/2022

Antidegradation Yes No

Approved TMDL?

Yes No

Waterbody Tier Level Tier I

Use Support Category 1

Approval Date of TMDL

Waste Load Allocation Information

Modeled Reach Length 58.5 Miles Date of Allocation 2/10/2022

Name of Model Used QUAL2K Allocation Type 2 Seasons

Model Completed by Jacobs Type of Model Used Calibrated

Allocation Developed by Consultant

Waste Load Allocation Summary

Annual Effluent Limits	Conventional Parameters				Other Parameters													
	Qw	19.5	MGD		Qw	19.5	MGD		Qw		MGD		Qw		MGD			
Season	Summer				Winter				Season				Season					
From	May				Nov				From				From					
Through	Oct				Apr				Through				Through					
CBOD5					CBOD5	13500	lbs/day		CBOD5	19906	lbs/day		TP			TP		
NH3-N					NH3-N				NH3-N				TN			TN		
TKN					TKN				TKN				TSS			TSS		
D.O.					D.O.				D.O.									

"Monitor Only" Parameters for Effluent:	Parameter	Frequency	Parameter	Frequency
	TP	Monthly		
	NO2+NO3-N	Monthly		
	TKN	Monthly		

Water Quality Characteristics Immediately Upstream of Discharge				
Parameter	Summer		Winter	
CBODu	1.43	mg/l	2.74	mg/l
NH3-N	6.75	mg/l	5.03	mg/l
Temperature	29.25	°C	21.36	°C
pH	7.71	su	7.75	su

Hydrology at Discharge Location				Method Used to Calculate	
Drainage Area Qualifier Exact	Drainage Area	21005	sq mi		
	Stream 7Q10	4387	cfs	ADEM Estimate w/USGS Gage Data	
	Stream 1Q10	3290	cfs	ADEM Estimate w/USGS Gage Data	
	Stream 7Q2	6386	cfs	ADEM Estimate w/USGS Gage Data	
	Annual Average	30642	cfs	ADEM Estimate w/USGS Gage Data	

Comments and/or Notations

Mixing Zone Analysis Summary

Page 1

REQUEST INFORMATION

request number: 3853

From: (Responsible Engineer) Scott Jackson In Branch/Section Industrial
Date Submitted 2/23/2022 **Date Required** 3/25/2022 **FUND Code** 210
Date Permit application received by NPDES program 3/1/2022

Receiving Waterbody Alabama River (Claiborne Lake)

Previous Stream Name

Facility Name International Paper Company - Pine Hill (Name of Discharger-WQ will use to file)

Weyerhaeuser **Previous Discharger Name**

River Basin Alabama **Outfall Latitude** 31.975375 (decimal degrees)

***County** Wilcox **Outfall Longitude** -87.459708 (decimal degrees)

Permit Number AL0002674 **Permit Type** Expansion and Permit Reissuance

Permit Status Active

Type of Discharger INDUSTRIAL

Do other discharges exist that may impact the model? Yes No

If yes, impacting dischargers names.

Impacting dischargers permit numbers.

Existing Discharge Design Flow	<u>19.5</u>	MGD	Note: The flow rates given should be those requested for modeling.
Proposed Discharge Design Flow	<u>19.5</u>	MGD	

Seasonal limits requested? Yes No **If not seasonal, only the summer sections will be used**

Comments included

Yes No

Information Verified By KDP

Year File Was Started

12 Digit HUC Code 031502030805

Use Classification F&W

Date of MZ Response 6/3/2022

Site Visit Completed? Yes No

Date of Site Visit 4/27/2022

Hydrology

Drainage Area 21005 **sq mi**

Stream 7Q10 4387 **cfs**

Stream 1Q10 3290 **cfs**

Stream 7Q2 6386 **cfs**

Annual Average 30642 **cfs**

Method Used to Calculate

ADEM Estimate w/USGS Gage Data

ADEM Estimate w/USGS Gage Data

ADEM Estimate w/USGS Gage Data

ADEM Estimate w/USGS Gage Data

Date of MZ Analysis 2/21/2022

Model Completed by Jacobs

Pollutant Category

Whole Effluent Toxicity (WET) **Thermal** **Pathogens**

Mixing Zone Analysis Summary

WET Parameters

Summer

Acute

Ambient Streamflow cfs
 ZID Length Meters
 ZID IWC %

Chronic

Ambient Streamflow cfs
 Mixing Zone Length Meters
 Mixing Zone IWC %

Winter

Acute

Ambient Streamflow cfs
 ZID Length Meters
 ZID IWC %

Chronic

Ambient Streamflow cfs
 Mixing Zone Length Meters
 Mixing Zone IWC %

Thermal Parameters

Summer

Ambient Streamflow cfs
 Mixing Zone Length Meters
 Max. Effluent Temp °C

Winter

Ambient Streamflow cfs
 Mixing Zone Length Meters
 Max. Effluent Temp °C

Pathogen Parameters

Summer

Ambient Streamflow cfs
 ZID Length Meters
 Max. Effluent Fecal Conc Cols/100 mls
 Max. Effluent E. coli Conc Cols/100 mls
 Monthly Average Effluent E. coli Conc Cols/100 mls
 Max. Effluent Enterococci Conc (for coastal waters) Cols/100 mls

Winter

Ambient Streamflow cfs
 ZID Length Meters
 Max. Effluent Fecal Conc Cols/100 mls
 Max. Effluent E. coli Conc Cols/100 mls
 Monthly Average Effluent E. coli Conc Cols/100 mls
 Max. Effluent Enterococci Conc (for coastal waters) Cols/100 mls

Comments
 and/or
 Notations

International Paper-Pine Hill QUAL2K/CORMIX Review Rationale

Facility: International Paper-Pine Hill

Permit #: AL0002674

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Alabama River (Claiborne Lake)/ International Paper-Pine Hill

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Receiving Waterbody: Alabama River (Claiborne Lake)

County: Wilcox

Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

QUAL2K Review Rationale: International Paper-Pine Hill

I. BACKGROUND

Jacobs submitted a water quality model to be reviewed by the Water Quality Branch (WQB) on February 11, 2022 for International Paper-Pine Hill. The facility discharges to the Alabama River (Claiborne Lake). The model was completed in order to evaluate the effect of the proposed increased biochemical oxygen demand (BOD₅) limits for the facility's discharge permit. The facility has an existing long-term average flow rate of 19.5 MGD (30.17 cfs).

II. GEOGRAPHICAL INFORMATION

The current outfall, which is submerged, is located on the Alabama River (Claiborne Lake) in Wilcox County, Alabama with approximate latitude and longitude coordinates of 31.975375° and -87.459708°, respectively.

III. LOW-FLOW ESTIMATES

The outfall drainage area was delineated with a resulting area of 21,005 square miles. Low-flows obtained from the U.S. Army Corps of Engineers for the Millers Ferry Lock and Dam gave 7Q10 and 7Q2 values of 4387 cfs and 6386 cfs, respectively, at the outfall location.

IV. MODEL EVALUATION

The previous desktop model for this stretch of the Alabama River (Claiborne Lake) was completed by Keosha Powell in January 2019 for the Pine Hill Lagoon. There are twelve reaches, and the total modeled reach is 58.5 miles. Headwaters flow, tributary flows, and velocities were updated in this model. The depths for the modeled stretch of the Alabama River were updated based on bathymetry data provided by the U.S. Army Corps of Engineers. Ambient temperatures of 86°F and 68°F were used for the summer and winter models, respectively. Headwater flows of 4297 cfs (summer) and 5083 cfs (winter) were utilized in the Jacobs models; the Department utilized 7Q10 and 7Q2 values of 4310 cfs and 6274 cfs in reviewing the summer and winter models, respectively. A CBOD_w/CBOD₅ ratio of five was utilized for the International Paper discharge.

Based upon a review of the QUAL2K models submitted by Jacobs, the dissolved oxygen concentrations in the Alabama River (Claiborne Lake) downstream of the outfall remain above the minimum dissolved oxygen criterion of 5.0 mg/L when the facility discharges at the proposed monthly average BOD₅ loadings of 13,500 lbs/day for the summer and 19,906 lbs/day for the winter.

Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill

Permit #: AL0002674

CORMIX Review Rationale: International Paper-Pine Hill

I. BACKGROUND

Jacobs submitted a CORMIX modeling report to be reviewed by the Water Quality Branch on February 23, 2022 for International Paper-Pine Hill. The facility has an existing long-term average flow rate of 19.5 MGD (30.17 cfs). Model inputs developed by Jacobs for discharge and ambient parameters were utilized in the completion of this review with the exception of the ambient flows (see below). The facility utilizes a submerged multiport diffuser to discharge treated wastewater into the Alabama River (Claiborne Lake).

II. AMBIENT CONDITIONS

The use classification for the Alabama River (Claiborne Lake) at the point of discharge is *Fish and Wildlife (F&W)*. Low flow data obtained from the U.S. Army Corps of Engineers for the Millers Ferry Lock and Dam gave a 7Q10 value of 4387 cfs and a 1Q10 value of 3290 cfs at the outfall location. (As noted above, Jacobs utilized slightly different flow values – a 7Q10 of 4297 cfs and a 1Q10 of 3194 cfs.) Utilizing the long-term average (LTA) flow of 19.5 MGD and the 7Q10 value of 4387 cfs, a limiting dilution of 146.4:1 was determined. Therefore, based upon the established ADEM protocol for Whole Effluent Toxicity (WET) determination, acute toxicity using the 1Q10 applicable at the edge of the zone of initial dilution (ZID) will be employed for the review. The applicable distance to the edge of the ZID is 9.4 m (30.8 ft), based upon the criterion stating that the ZID is equal to ten percent of the mixing zone distance in any spatial direction. CORMIX evaluation outputs can be found in the following sections of this report.

III. DISCHARGE CONFIGURATION

The facility is proposing a new discharge structure which will be submerged approximately 21 feet in the Alabama River (Claiborne Lake). The new structure will consist of a 32-inch manifold with ten 16-inch diameter TideFlex nozzles. The effective diameter for each port is 8.6 inches. The diffuser manifold will extend from the right bank and issue 45 degrees in the downstream direction.

IV. MODEL EVALUATION

CORMIX2 was implemented to model the submerged multiport diffuser. In the modeling, the plume is positively buoyant and CORMIX2 predicts the plume's centerline to rise towards the surface. The Department's CORMIX2 model predicted an IWC of 3.43%, while the model submitted by Jacobs predicted an IWC of 3.54%. CORMIX2 did not explicitly state that the plumes were merged at the region of interest, so a CORMIX1 model was used for the modeling of an individual port. In the CORMIX1 modeling, the individual plumes were not merged at the Receiving Waterbody: Alabama River (Claiborne Lake)

County: Wilcox

Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
 Permit #: AL0002674

region of interest; therefore, CORMIX1 is the applicable model. CORMIX1 predicted an IWC of 8.1% at the ZID. Jacobs was informed of the applicable model and IWC for the facility and indicated that they were in agreement with the Department's CORMIX1 model and resulting IWC of 8.1%.

V. ADEM MIXING ZONE CRITERIA

General Information

Facility:	International Paper-Pine Hill
Permit #:	AL0002674
Current Outfall #:	001

Receiving Waterbody:	Alabama River
Discharger Latitude:	31.975375
Discharger Longitude:	-87.459708

Ambient Conditions

Receiving Waterbody 7Q10:	4387	cfs	124	cms
Receiving Waterbody 1Q10:	3290	cfs	93	cms

Width of Waterbody @ discharge point:	188	m	617	ft
Depth of Waterbody @ discharge point:	6.4	m	21	ft
Average depth @ discharge point:	5.26	m	17.25	ft

Discharge Conditions:

Discharge flow rate:	30.17	cfs	19.5	MGD
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WET Protocol

Limiting Dilution $S_{lim} = [(Q_w + 7Q_{10}) / Q_w]$	146.4
Applicable Flow to Use in Model	1Q10
Applicable Toxicity	Acute @ edge of the ZID

Receiving Waterbody: Alabama River (Claiborne Lake)
 County: Wilcox
 Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

ZID Criteria

- | | | |
|--|--------|----------|
| 1. 10% of the mixing zone distance in any spatial direction
<i>Equals 0.1 x 94 m</i> | 9.4 m | 30.8 ft |
| 2. 5 times the local water depth in any horizontal direction
<i>Equals 5 x 6.4 m</i> | 32 m | 105 ft |
| 3. 50 times the discharge length scale (DLS) in any spatial direction
<i>Equals 50 x 0.19</i> | 9.68 m | 31.76 ft |

Site Visit Summary

I. SITE VISIT OVERVIEW

A site visit was conducted on April 27, 2022 by Keosha Powell of ADEM, Water Quality Branch. Lance McCray assisted in locating the outfall. Pictures were taken of the outfall location and a location downstream of the outfall.

II. SITE VISIT OBSERVATIONS

Site Visit Information

Project:	IP Pine Hill QUAL2K/CORMIX Review
Facility Name:	International Paper-Pine Hill
Permit #:	AL0002674
Physical Address:	7600 Hwy 10 W Pine Hill, AL 36769
Discharger Location: (From Application)	Latitude: 31.975000 Longitude: -87.458333
Contact:	Lance McCray
Contact Phone:	334-963-2303
Basin:	Alabama River
County:	Wilcox
Receiving Stream:	Alabama River (Claiborne Lake)
Design Flow (MGD):	19.5

Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

Site Visit Field Form

Date of Visit: April 27, 2022

Time of Visit: 11:00AM PM

Weather Summary: Clear blue skies; Temperature in mid sixties

Receiving Waterbody Flow Stage: Flood Above Normal Normal Low Dry

Velocity: Swift (>3ft/s) Moderate (1.5-3ft/s) Slow (<1.5ft/s)

Wadeable: Yes No Unknown (At Outfall)

Recent Rain Event: Yes No Unknown

Surface Oils: Yes No

Substrate: Rock; sand

Upstream Conditions: Good flow; brownish color to water

Downstream Conditions: Good flow; brownish color to water

Significant Odors: None

Land Use: Forested

Biological Indicators: None Observed

Canopy: Open

GPS Coordinates: Latitude: 31.975375°
Longitude: -87.459708°

Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

Appendices

I. Site Visit Photos

Figure 1. IP-Pine Hill's New Diffuser



Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

Figure 2 IP-Pine Hill Outfall



Figure 3. IP-Pine Hill Outfall, looking upstream



Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

Figure 4. IP-Pine Hill Outfall, looking downstream



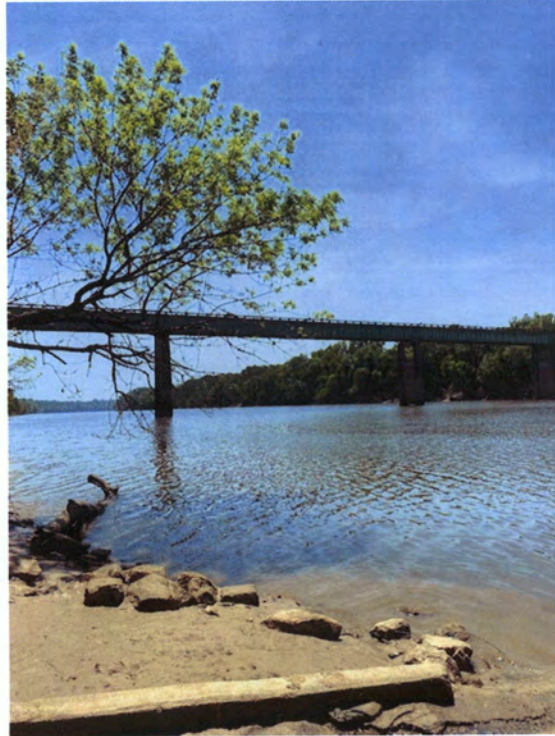
Figure 5. Downstream of outfall at AL Hwy 10, looking upstream



Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

Figure 6. Downstream of outfall at AL Hwy 10, looking downstream



Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

II. AREA MAPS

Figure 7. IP-Pine Hill Outfall Location Map (Aerial Overlay)



Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Facility: International Paper-Pine Hill
Permit #: AL0002674

Figure 8. IP-Pine Hill Outfall Location Map (Topographic Overlay)



Receiving Waterbody: Alabama River (Claiborne Lake)
County: Wilcox
Performed by: KDP- Water Quality

Jackson, Scott A

Subject: RE: NPDES Request for Modification

From: Lance McCray <Lance.McCray@ipaper.com>
Sent: Monday, June 20, 2022 12:46 PM
To: Jackson, Scott A <scott.jackson@adem.alabama.gov>
Cc: Jennifer P. Stacey <Jennifer.Stacey@ipaper.com>
Subject: NPDES Request for Modification

I have attached a letter requesting a modification of NPDES Permit No. AL0002674 and it is being hard mailed to you today.

Please let me know if you have any questions.

Thanks

Lance McCray
Environmental Manager
International Paper – Pine Hill Operations
P.O. Box 250
7600 Highway 10 West
Pine Hill, AL 36769
Office: (334) 963-2303
Cell: (334) 327-4916

RECEIVED**JUN 24 2022****INDUSTRIAL SECTION**

June 16, 2022

Mr. Scott Jackson
Water Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, AL 36130-1463

Subject: International Paper Pine Hill Mill
NPDES Permit Application – AL0002674
Request for Modification of NPDES Permit No. AL0002674

Dear Mr. Jackson:

The International Paper (IP) Pine Hill Mill located in Pine Hill, Alabama is submitting this request for modification of its National Pollutant Discharge Eliminations System (NPDES) permit No. AL0002674. In anticipation of this request, the IP Pine Hill Mill submitted a Request for Water Quality Branch Review of the Alabama River Water Quality Model on February 10, 2002, and a Request for Water Quality Branch Review of the Alabama River CORMIX Model on February 22, 2022. It is our understanding that the Water Quality Branch has reviewed these documents and the Alabama Department of Environmental Management (ADEM) is prepared to modify the NPDES permit based on those reviews.

Discharges from the IP Pine Hill Mill are subject to the requirements in 40 CFR 430 – The Pulp, Paper, and Paperboard Point Source Category. The allowable discharges for 5-day biochemical oxygen demand, total suspended solids, pentachlorophenol, and trichlorophenol from 40 CFR 430 are based on the mill production as defined in 40 CFR 430.01(n). Production values for January 2016 through December 2021 were used for the calculations and a summary is shown in Table 1.

The IP Pine Hill Mill uses a combined unbleached kraft and semi-chemical process where the spent semi-chemical cooking liquor is burned within the unbleached kraft chemical recovery system. Paper Machine #1 produces unbleached Kraft linerboard from unbleached Kraft pulp, controlled soda semi-chemical (CSSC) pulp, and non-deinked secondary fiber (recycle pulp). Paper Machine #2 produces unbleached corrugating medium from CSSC pulp and non-deinked secondary fiber (recycle pulp). Production from unbleached Kraft pulp and CSSC pulp are subject to 40 CFR 430 Subpart C. Production from non-deinked secondary fiber is subject to 40 CFR 430 Subpart J. Additionally, any production from non-deinked secondary fiber on Paper Machine #2 in excess of 170 tons per day is subject to 40 CFR 430 Subpart J NSPS requirements.

Table 1. NPDES Permit Production Basis

NPDES Permit Modification Request for AL0002674, International Paper Pine Hill Mill

Process Description	Last 12 Months ¹ Highest Monthly Average (1,000 lbs/day)	Highest Year of Last 5 ² Monthly Average (1,000 lbs/day)
PM1 Unbleached Kraft Production ³	2,978	2,948
PM1 CSSC Kraft Production ⁴	183	181
PM1 Secondary Fiber Production ⁵	309	255
PM2 CSSC Kraft Production ³	1,298	1,370
PM2 Secondary Fiber Production ⁵	652	633

¹ October 2021

² Calendar Year 2017

³ Measured as off-the-machine production furnished by unbleached Kraft pulp

⁴ measured as off-the-machine production furnished by unbleached CSSC pulp

⁵ Measured as off-the-machine production furnished by non-deinked secondary fiber

PM = paper machine

lbs/day = pounds per day

The calculated effluent limitation guideline-based allocations for 5-day biochemical oxygen demand (BOD) and total suspended solids based on the October 2021 production values are shown in Table 2. The calculated effluent limitation guideline-based allocations for pentachlorophenol and trichlorophenol are shown in Table 3. In previous permits, more stringent limits for BOD, TSS, pentachlorophenol, and trichlorophenol were retained from the previous permit rather than setting the limits based on the calculated production-based allocations. The current BOD limits are based on a previous water quality model. With this permit modification, the IP Pine Hill Mill is requesting the BOD limits for the winter season (November – April) be based on the effluent limitation guideline-based allocation and the summer season (May – October) be based on the recently updated QUAL2K water quality model that has been reviewed by the Water Quality Branch.

Table 2. Calculated Effluent Limitation Guideline-based Allocations for BOD and TSS
NPDES Permit Modification Request for AL0002674, International Paper Pine Hill Mill

Process Description	Applicable Subcategory	Limit Basis	Production (1,000 lbs/day)	Allowable Limits (lbs/day)			
				BOD		TSS	
				Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
PM1 Unbleached Kraft Production	C	BCT	2,978	11,911	23,821	18,610	37,221
PM1 CSSC Kraft Production	C	BCT	183	732	1,464	1,144	2,288
PM1 Secondary Fiber Production	J	BPT	309	463	927	772	1,545
PM2 CSSC Kraft Production	C	BCT	1,298	5,193	10,386	8,114	16,228
PM2 Secondary Fiber Production	J	BPT / BCT	340	952	1,938	1,564	3,128
PM2 Secondary Fiber Production	J	NSPS ¹	312	655	1,216	717	1,372
TOTALS			5,420	19,906	39,752	30,921	61,782

PM = paper machine

BOD = 5-day biochemical oxygen demand

TSS – total suspended solids

lbs/day = pounds per day

¹ Paper Machine #2 production from secondary fiber in excess of 170 tons per day (340,000 lbs/day) is subject to NSPS

Table 3. Calculated Effluent Limitation Guideline-based Allocations for Pentachlorophenol and Trichlorophenol
NPDES Permit Modification Request for AL0002674, International Paper Pine Hill Mill

Process Description	Applicable Subcategory	Limit Basis	Production (1,000 lbs/day)	Allowable Limits (lbs/day) ¹	
				Pentachlorophenol	Trichlorophenol
				Daily Maximum	Daily Maximum
PM1 Unbleached Kraft Production	C	BAT	2,978	1.73	1.58
PM1 CSSC Kraft Production	C	BAT	183	0.12	0.11
PM1 Secondary Fiber Production	J	BAT	309	0.27	0.09
PM2 CSSC Kraft Production	C	BAT	1,298	0.75	0.69
PM2 Secondary Fiber Production	J	BAT	340	0.30	0.10
PM2 Secondary Fiber Production	J	NSPS ²	312	0.27	0.09
TOTALS			5,420	3.44	2.66

PM = paper machine

lbs/day = pounds per day

¹ Limits for pentachlorophenol and trichlorophenol are not applicable if the discharger certifies non-use of chlorophenolic biocides.

² Paper Machine #2 production from secondary fiber in excess of 170 tons per day (340,000 lbs/day) is subject to NSPS

IP Pine Hill Mill requests the permit be modified based on the October 2021 production data and the revised QUAL2K water quality model. Table 4 summarizes the requested permit limits for Outfall DSN001.

Table 4. Requested Permit Limits for Outfall DSN001

NPDES Permit Modification Request for AL0002674, International Paper Pine Hill Mill

Parameter	Units of Measure	Requested Limits		Seasonal
		Monthly Average	Daily Maximum	
pH	s.u.	6.0 to 9.0		–
BOD	lbs/day	19,906	39,752	November – April
BOD	lbs/day	13,500	20,250	May – October
TSS	lbs/day	30,922	61,781	–
Pentachlorophenol ¹	lbs/day	–	3.44	–
Trichlorophenol ¹	lbs/day	–	2.66	–
Total Ammonia Nitrogen	mg/L	–	Report	April - October
Total Nitrate plus Nitrite	mg/L	–	Report	April - October
Total Phosphorus	mg/L	–	Report	April - October
Total Kjeldahl Nitrogen	mg/L	–	Report	April - October
Flow	MGD	Report	Report	–

BOD = 5-day biochemical oxygen demand

TSS – total suspended solids

s.u. = standard units

lbs/day – pounds per day

mg/L = milligrams per liter

MGD = million gallons per day

¹ Limits for pentachlorophenol and trichlorophenol are not applicable if the discharger certifies non-use of chlorophenolic biocides.

The IP Pine Hill Mill is in the process of replacing the existing multi-port diffuser with a new, more efficient multi-port diffuser which will provide better mixing of the effluent with the Alabama River. The new diffuser will consist of a 32-inch diameter manifold and ten 16-inch TideFlex nozzles. A request for review of the mixing zone analysis for the new diffuser was submitted to ADEM on February 22, 2022, for review by the ADEM Water Quality Branch.

Based on the review from the Water Quality Branch it was determined that the appropriate instream waste concentration (IWC) to use for toxicity testing for the new diffuser is 8%. IP Pine Hill Mill requests that tiered limits for toxicity testing be included in the modified permit using the current value of 28% for the existing diffuser and 8% for the new diffuser when it is installed and operational.

The IP Pine Hill Mill is not requesting changes to permit limitations or monitoring requirements for any outfalls other than Outfall DSN001 at this time. No significant changes to the facility have been made since the last permit application was submitted.

If you have any questions or need any additional information, please contact Lance McCray at telephone number (334) 963-2303 or via email at Lance.McCray@ipaper.com.

Sincerely,



Steve Webb
Mill Manager

CC: File
Jennifer P. Stacy
Lance McCray
Cameron Cox

STEVE WEBB
MILL MANAGER
INTERNATIONAL PAPER CO
PINE HILL CONTAINERBOARD MILL
P O BOX 250
PINE HILL AL 36769