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JUN 3 0 2026

MS. CYNTHIA HENDREN-MILLER
GENERAL MANAGER
WESTROCK CP, LLC
1611 COUNTY ROAD 85
STEVENSON, AL 357725597

**RE: REVISED DRAFT PERMIT
NPDES PERMIT NUMBER AL0022314**

Dear Ms. Hendren-Miller:

Transmitted herein is a revised draft of the referenced permit.

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:

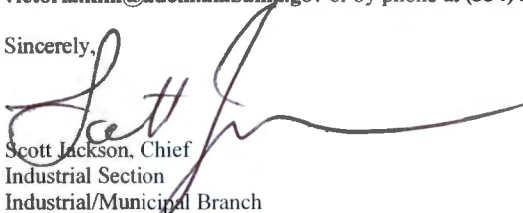
1. The user has logged in to E2 since October 1, 2019; and
2. The E2 user account is set up using a unique email address.

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 Victoria Kim by e-mail at victoria.kim@adem.alabama.gov or by phone at (334) 271-7895.

Sincerely,


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

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

Coastal Office
1615 South Broad Street
Mobile, AL 36605
(251) 450-3400
(251) 479-2593 (FAX)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: WESTROCK CP, LLC

FACILITY LOCATION: WESTROCK CP, LLC-STEVENSON MILL
1611 COUNTY ROAD 85
P.O. BOX 508
STEVENSON, ALABAMA 35772
JACKSON COUNTY

PERMIT NUMBER: AL0022314

RECEIVING WATERS: 001, 002 - TENNESSEE RIVER
005, 006, 022, 023 - UNNAMED TRIBUTARY TO TENNESSEE RIVER
024, 025 - UNNAMED TRIBUTARY TO BENGIS 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:

EFFECTIVE DATE:

EXPIRATION DATE:

Revised DRAFT

Alabama Department of Environmental Management
Water Division Chief

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PART I: DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS**A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS****DSN0011: Process wastewater from paperboard manufacturing, landfill leachate, and stormwater associated with industrial activity 3/**

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 outfall(s) listed above and described more fully in the Permittee's application. Such discharges 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
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	*****	*****	*****	(Report) Minimum Daily	*****	*****	mg/l	3X Weekly test	Grab	All Months
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	14461 Monthly Average	28902 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	20205 Monthly Average	40410 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	All Months
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 1 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	Recorder	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.

DSN0011 (Continued): Process wastewater from paperboard manufacturing, landfill leachate, and stormwater associated with industrial activity 3/

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 outfall(s) listed above and described more fully in the Permittee's application. Such discharges 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
Certification - River Monitoring (51946) 4/ Effluent Gross Value	*****	*****	*****	*****	*****	0 Maximum Daily	Yes=0; No=1	Monthly	Not Applicable	Jun, Jul, Aug, Sep

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/ Reporting for this parameter will be in compliance with Part IV.E.6.

DSN001T: Process wastewater from paperboard manufacturing, landfill leachate, and stormwater associated with industrial activity 3/

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 outfall(s) listed above and described more fully in the Permittee's application. Such discharges 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 (61425) Effluent Gross Value	*****	0 Single Sample	pass=0; fail=1	*****	*****	*****	*****	Annually	Grab	All Months
Toxicity, Pimephales Acute (61427) Effluent Gross Value	*****	0 Single Sample	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.D for Effluent Toxicity Limitations and Biomonitoring Requirements.

DSN001Y: Process wastewater from paperboard manufacturing, landfill leachate, and stormwater associated with industrial activity 3/

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 outfall(s) listed above and described more fully in the Permittee's application. Such discharges 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) Effluent Gross Value 4/	*****	0 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Trichlorophenol (81848) Effluent Gross Value 4/	*****	0 Maximum Daily	lbs/day	*****	*****	*****	*****	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/ In lieu of monitoring for these parameters, the permittee may certify non-use of chlorophenolic containing compounds according to the requirements at 40 CFR 430.64 and 40 CFR 430.104 by entering *9 on the discharge monitoring report.

DSN0021: Treated sanitary wastewater 3/

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 outfall(s) listed above and described more fully in the Permittee's application. Such discharges 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	*****	*****	*****	*****	30.0 Monthly Average	45.0 Maximum Daily	mg/l	Weekly	Composite	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	Weekly	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	30.0 Monthly Average	45.0 Maximum Daily	mg/l	Weekly	Composite	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Weekly	Instantaneous	All Months
Chlorine, Total Residual (50060) Effluent Gross Value	*****	*****	*****	*****	*****	1.0 Maximum Daily	mg/l	Monthly	Grab	All Months
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	126 Monthly Average	235 Maximum Daily	col/100mL	Weekly	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.

DSN005S: Landfill leachate and stormwater associated with industrial activity 3/ 4/

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 outfall(s) listed above and described more fully in the Permittee's application. Such discharges 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	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Semi-Annually	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15 Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Arsenic, Dissolved (As As) (01000) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	ug/l	Semi-Annually	Grab	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-Annually	Estimate	All Months
Cyanide, Free Available (51173) 5/ Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	ug/l	Semi-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/ In the event the sampling location for DSN005 is inaccessible due to flooding, sampling shall be performed at an alternative upstream sampling location for purposes of compliance with this permit.
- 5/ For the purpose of demonstration of compliance with this parameter, "Cyanide, Free Available" and "Cyanide, Free" shall be considered equivalent. The test methods listed in 40 CFR 136.3, Table IB for "24.A Cyanide, Free" or equivalent EPA approved methods shall be used for analysis.

DSN006S, DSN0022S: Stormwater associated with industrial activity 3/ 4/ 6/ 7/

DSN023S: Process discharges associated with exterior rail car washing operations and stormwater runoff from industrial activity 3/ 4/ 5/ 6/

DSN025S: Stormwater associated with areas around wet decking operations 3/ 4/ 6/

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 outfall(s) listed above and described more fully in the Permittee's application. Such discharges 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	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Semi-Annually	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15 Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-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.**

- 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 for DSN023S is required during a qualifying storm event.
- 6/ DSN022 and DSN023 are considered representative of DSN006 and DSN025; therefore, monitoring is only required at these outfalls.
- 7/ In the event the sampling location for DSN022 is inaccessible due to weather conditions during a monitoring period, sampling shall be performed at an alternate sampling location from the constructed wetlands.

DSN0241: Stormwater and contact water from wet decking operations 3/ 4/ 5/ 6/

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 outfall(s) listed above and described more fully in the Permittee's application. Such discharges 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	Monthly	Grab	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	Monthly	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15 Maximum Daily	mg/l	Monthly	Grab	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Monthly	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.

- 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/ There shall be no debris discharged. 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 in) diameter round opening and is present in the discharge.
- 6/ Monthly sampling is required from DSN024 only when the wet deck pond overflows.

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 (MONTH, YEAR)**. 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 [Month, Year]**. 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:
 - (i) one hundred micrograms per liter;
 - (ii) two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
 - (iii) 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:

- (i) five hundred micrograms per liter;
- (ii) one milligram per liter for antimony;
- (iii) 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. Routine inspections should be done at a frequency to ensure that the BMP is continually implemented and effective and in no case less frequent than once per year;
- 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, firefighting foams, 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. 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. Documentation detailing the steps that have and are being taken to minimize the impingement and entrainment levels shall be maintained on site and made available upon request.
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.

D. 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:
 - (1) The samples shall be diluted, using an appropriate control water, to the Instream Waste Concentration (IWC), which is 16% effluent. The IWC is the actual concentration of effluent, after mixing, based on the results of a CORMIX analysis.
 - (2) 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.
 - (2) 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.

- (3) 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/600/R-92/081, EPA/833/B-99/022 and/or EPA/600/6-91/005F, etc.).

e. Test Methods:

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)
 - (i) Name of firm
 - (ii) Telephone number
 - (iii) 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

(i) Sampling point

(ii) Sample collection dates and times (to include composite sample start and finish times)

(iii) Sample collection method

(iv) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)

(v) Sample temperature when received at the laboratory

(vi) Lapsed time from sample collection to delivery

(vii) Lapsed time from sample collection to test initiation

(2) Dilution Water Samples

(i) Source

(ii) Collection date(s) and time(s) (where applicable)

(iii) Pretreatment

(iv) 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

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

E. RECEIVING STREAM WATER QUALITY MONITORING REQUIREMENTS

- 1. The discharge authorized by this permit shall not cause a violation of the applicable dissolved oxygen standard downstream of the discharge. The permittee shall take steps necessary to ensure that its effluent does not result in dissolved oxygen values at the five-foot depth being depressed below the water quality standard as measured by the permittee, ADEM, EPA, or its successor.
- 2. Stream monitoring shall be performed between June 1 and September 30 downstream from the WestRock CP, LLC discharge point. The parameters to be monitored are the dissolved oxygen, pH, and water temperature at the five-foot depth in the middle of the river.
- 3. Frequency
 - a. Monitoring is required once per two weeks under normal conditions.
 - b. Monitoring is not required if the in-stream dissolved oxygen at mile 405.7 is 6.0 mg/l or greater.
 - c. Monitoring is required once per week during upset conditions or if the dissolved oxygen at any stations is 5.4 mg/l or less and will continue until the upset condition is corrected and/or the dissolved oxygen at all stations is greater than 5.4 mg/l.
 - d. Monitoring is required three (3) days per week when the dissolved oxygen upstream of the mill discharge is 5.0 mg/L or less.
- 4. Locations

Monitoring stations shall be at the Tennessee River miles 405.7 (power line crossing), 399, 395, and 387.
- 5. Sample Collection and Analysis

Sample collection and analysis shall be performed in accordance with EPA approved sample collection protocol and analysis methods. The times samples are collected should be reported and when practicable, all measurement should be made prior to 12:00 pm.

6. Reporting

River monitoring data shall be submitted electronically to an email address provided by the Department. The permittee is required to verify submittal of the river monitoring data by submitting a value of "0" on the discharge monitoring report for DSN0011 under the parameter "Certification – River Monitoring" for those months in which monitoring is required.

F. LAND APPLICATION REQUIREMENTS AND GROUNDWATER MONITORING**1. Land Application Operation Requirements**

During the period beginning the effective and lasting through the expiration of this permit, the permittee is hereby authorized to land apply paper mill process wastewater, primary and secondary sludge and wood waste boiler ash sludge to the permittee's fields numbered 1, 2, 3, 4, 6, 7a, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 24, 25, 26, 27, 28, 30, 31, 32, 33 and 34 in accordance with the following conditions, limitations, and monitoring requirements.

- a. Sludge shall be applied at a rate no greater than 100 dry ton/acre/years
- b. Sludge application, on a field which is all or in part a 100 year floodplain, shall be limited to:
 - (1) Surface application with plowing or disking of application area within 24 to 48 hours
- c. Spray application of sludge shall be limited to:
 - (1) Fields with less than 10% slope
 - (2) Fields not all or in part of the 100 year flood plain
 - (3) Days without periods of rain and/or high winds which could carry the applied wastes offsite
- d. Surface application of sludge shall be limited to:
 - (1) Day without heavy rainfall that could carry sludge offsite
 - (2) Fields with less than 10% slope, unless sludge is plowed or disked into soil daily.
 - (3) Fields that will be cropped during the next appropriate growing season.
- e. Subsurface application of sludge shall be limited to fields that will be cropped during the next appropriate growing season.
- f. Best management practices erosion control measures shall be implemented to minimize soil loss.
- g. All spray/inject equipment and monitoring provisions shall be properly operated and maintained at all times to prevent leaks and spills.
- h. The permittee shall perform annual monitoring of a representative sample of the material to be land applied. Parameters to be tested are Total Solids, TKN, Nitrates + Nitrites, Total Calcium, Total Magnesium, Total Sodium, Total Potassium, Total Barium, Total Cadmium, Total Copper, Total Lead, Total Manganese, Total Nickel, Total Zinc, Chlorides, Total Dissolved Solids, Total Sulfates, pH, and Sediment Sample (Dry Weight). Land application monitoring results obtained during the previous year shall be summarized on a form approved by the Department, and submitted to the Department no later than the 28th day of January following the monitoring period. As a minimum, the following records shall be maintained by the Permittee and will be subject to inspection by the Department:
 - (1) All information required by land application monitoring reports
 - (2) Field, date, and time span of application and volume applied
 - (3) Field, date, quantity and type of fertilizer applied
 - (4) Date and amount of rainfall
- i. The permittee shall take necessary measures to ensure that sludge and/or runoff from the application fields does not enter a water of the state.
- j. The permittee shall perform annual analysis of groundwater monitoring wells 1 through 25. Parameters to be tested area Conductivity, Sulfate, pH, Nitrates + Nitrites, Total Phosphorous, Total Potassium, Total Barium, Total Cadmium, Total Chromium, Total Copper, Total Lead, Total Nickel, Total Zinc, Chlorides, Total Dissolved Solids, and water level. Results of this

testing shall be submitted to the Department no later than the 28th of January of the following year. The results shall be submitted in report form and shall include the following:

- (1) The nature and the extent of any groundwater contamination (if any). Include contour maps showing the groundwater flow direction;
- (2) Discussion of all analytical results;
- (3) Discussion of concentration trends in each monitoring well
- (4) All potentiometric data collected during each monitoring event, including top casing elevations, measured water level, total well depths, and calculated groundwater elevations;
- (5) A potentiometric map illustrating the groundwater flow direction for each monitoring event;
- (6) All field parameter data collected during the well purging activities;
- (7) The specific dates that the groundwater sampling activities were conducted; and
- (8) The report shall be prepared by and bear the signature and the license number of a licensed professional geologist or professional engineer registered in the State of Alabama.

EDWARD F. POOLOS
DIRECTOR

JEFFERY W. KITCHENS
DEPUTY DIRECTOR



KAY IVEY
GOVERNOR

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: April 22, 2026

Prepared By: Victoria Kim

NPDES Permit No. AL0022314

1. Name and Address of Applicant:

WestRock CP, LLC
Post Office Box 508
Stevenson, AL 35772

2. Name and Address of Facility:

WestRock CP, LLC-Stevenson Mill
1611 County Road 85
P.O. Box 508
Stevenson, AL 35772

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

The facility is an integrated pulp and paper mill that produces corrugated paperboard through a manufacturing process that utilizes wood chips and the non-bleaching neutral sulfite semi-chemical curing process and secondary fibers in a non-deinking process.

4. Applicant's Receiving Waters

Receiving Waters

Tennessee River

Unnamed Tributary to Tennessee River
Unnamed Tributary to Bengis Creek

Classification

Public Water Supply (PWS), Swimming and Other Whole Body
Water-Contact Sports (S), and Fish and Wildlife (F&W)
Fish and Wildlife (F&W)
Fish and Wildlife (F&W)

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.



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

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

Coastal Office
1615 South Broad Street
Mobile, AL 36605
(251) 450-3400
(251) 479-2593 (FAX)

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

James H. Carlson, 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:

James H. Carlson, 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: April 22, 2026

REVISED DATE: June 23, 2026

PREPARED BY: Victoria Kim

Permittee Name: WestRock CP, LLC

Facility Name: WestRock CP, LLC – Stevenson Mill

Permit Number: AL0022314

PERMIT IS REISSUANCE DUE TO EXPIRATION

DISCHARGE SERIAL NUMBERS (DSN) & DESCRIPTIONS:

DSN	Description
001	Process wastewater from paperboard manufacturing, landfill leachate, and stormwater associated with industrial activity
002	Treated sanitary wastewater
005	Landfill leachate and stormwater associated with industrial activity
006, 022	Stormwater associated with industrial activity
023	Process discharges associated with exterior rail car washing operations and stormwater runoff from industrial activity
024	Stormwater and contact water from wet decking operations
025	Stormwater associated with areas around wet decking operations

INDUSTRIAL CATEGORY: 40 CFR Part 430 – The Pulp, Paper, and Paperboard Point Source Category
§430.62 & 430.64 Subpart F – Semi-Chemical Subcategory (Sodium Base Mills)
§430.102 & 430.104 Subpart J – Secondary Fiber Non-Deink Subcategory

40 CFR Part 429 – Timber Products Processing Point Source Category
§429.101 Subpart I – Wet Storage Subcategory

MAJOR: Yes

STREAM INFORMATION:

Receiving Stream: Tennessee River (DSN001, DSN002)
Classification: Public Water Supply, Swimming, Fish & Wildlife
River Basin: Tennessee River Basin
7Q10: 6678 CFS
7Q2: 9447 CFS
1Q10: 2525 CFS
Annual Average Flow: 37156 CFS
303(d) List: NO
Impairment: N/A
TMDL: NO

Receiving Stream:	Unnamed Tributary to Tennessee River (DSN005, DSN006, DSN022, DSN023)
Classification:	Fish and Wildlife
River Basin:	Tennessee River Basin
7Q10:	0 CFS
7Q2:	0 CFS
1Q10:	0 CFS
Annual Average Flow:	0.40 CFS
303(d) List:	NO
Impairment:	N/A
TMDL:	NO

Receiving Stream:	Unnamed Tributary to Bengis Creek (DSN024, DSN025)
Classification:	Fish & Wildlife
River Basin:	Tennessee River Basin
7Q10:	0 CFS
7Q2:	0 CFS
1Q10:	0 CFS
Annual Average Flow:	0.64 CFS
303(d) List:	NO
Impairment:	N/A
TMDL:	NO

DISCUSSION:

The facility is an integrated pulp and paper mill that produces corrugated paperboard through a manufacturing process that utilizes wood chips and the non-bleaching neutral sulfite semi-chemical curing process and secondary fibers in a non-deinking process.

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 new or expanded discharge. Therefore, the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

DSN0011: Process wastewater from paperboard manufacturing, landfill leachate, and stormwater associated with industrial activity

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency	Sample Type	Seasonal	Basis
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	*****	*****	*****	(Report) Minimum Daily	*****	*****	mg/l	3X Weekly test	Grab	All Months	BPJ
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	14461 Monthly Average	28902 Maximum Daily	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	All Months	EGL/ABS
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	3X Weekly test	Grab	All Months	WQBEL/ BPJ
Solids, Total Suspended (00530) Effluent Gross Value	20205 Monthly Average	40410 Maximum Daily	lbs/day	*****	*****	*****	*****	3X Weekly test	Composite	All Months	EGL/ABS
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Composite	All Months	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	Recorder	All Months	BPJ
Certification - River Monitoring (51946) Effluent Gross Value	*****	*****	*****	*****	*****	0 Maximum Daily	Yes=0; No=1	Monthly	Not Applicable	Jun, Jul, Aug, Sep	BPJ

DSN001T: Process wastewater from paperboard manufacturing, landfill leachate, and stormwater associated with industrial activity

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

DSN001Y: Process wastewater from paperboard manufacturing, landfill leachate, and stormwater associated with industrial activity

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency	Sample Type	Seasonal	Basis
Pentachlorophenol (39032) Effluent Gross Value	*****	0 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	EGL
Trichlorophenol (81848) Effluent Gross Value	*****	0 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	EGL

DSN0021: Treated sanitary wastewater

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency	Sample Type	Seasonal	Basis
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	30.0 Monthly Average	45.0 Maximum Daily	mg/l	Weekly	Composite	All Months	BPJ
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	Weekly	Grab	All Months	WQBEL/ BPJ
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	30.0 Monthly Average	45.0 Maximum Daily	mg/l	Weekly	Composite	All Months	BPJ
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Weekly	Instantaneous	All Months	BPJ
Chlorine, Total Residual (50060) Effluent Gross Value	*****	*****	*****	*****	*****	1.0 Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	126 Monthly Average	235 Maximum Daily	col/100mL	Weekly	Grab	All Months	WQBEL

DSN005S: Landfill leachate and stormwater associated with industrial activity

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency	Sample Type	Seasonal	Basis
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
pH (00400) Effluent Gross Value	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Semi-Annually	Grab	All Months	BPJ
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15 Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency	Sample Type	Seasonal	Basis
Arsenic, Dissolved (As As) (01000) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	ug/l	Semi-Annually	Grab	All Months	BPJ
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-Annually	Estimate	All Months	BPJ
Cyanide, Free Available (51173) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	ug/l	Semi-Annually	Grab	All Months	BPJ

DSN006S, 022S, 023S: Stormwater associated with industrial activity

DSN025S: Stormwater associated with areas around wet decking operations

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency	Sample Type	Seasonal	Basis
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
pH (00400) Effluent Gross Value	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Semi-Annually	Grab	All Months	BPJ
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15 Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Semi-Annually	Estimate	All Months	BPJ

DSN0241: Stormwater and contact water from wet decking operations

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency	Sample Type	Seasonal	Basis
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	Monthly	Grab	All Months	EGL
Solids, Total Suspended (00530) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ
Oil & Grease (00556) Effluent Gross Value	*****	*****	*****	*****	*****	15 Maximum Daily	mg/l	Monthly	Grab	All Months	BPJ

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency	Sample Type	Seasonal	Basis
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Monthly	Estimate	All Months	BPJ

***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

DSN001

Discharges from this outfall include treated process wastewater associated with pulp and paper manufacturing, stormwater from the wood yard, landfill leachate*, and stormwater from the mill process areas.

***Landfill Leachate**

The facility discharges landfill leachate, which is regulated under 40 CFR 445, from the Upper Leachate Pond through outfall DSN001. 40 CFR 445.1(e) specifies that the regulations therein "do not apply to dischargers of landfill wastewater from landfills operated in conjunction with other industrial or commercial operations when the landfill only receives wastes generated by the industrial or commercial operations directly associated with the landfill."

Best Professional Judgment (BPJ)

pH

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(2)(e)2 – Specific Water Quality for Public Water Supply classified streams states: "Sewage, industrial waste or other wastes shall not cause the pH to deviate more than one unit from then normal or natural pH, nor be less than 6.0, nor greater than 8.5 standard units." The discharge is not expected to have a significant effect on the receiving stream due to the low ratio of effluent flow to stream flow; therefore, the existing permit limits will be continued in this permit issuance.

Nutrients

Monitoring for Total Ammonia as Nitrogen, Total Kjeldahl Nitrogen, Nitrates + Nitrites, and Total Phosphorus will be continued in this permit issuance. The proposed frequency is once per month during the growing season (April to October), except for Ammonia, which is to be monitored year-round.

Dissolved Oxygen

Monitoring for this parameter will be continued in this permit issuance. The facility performs river monitoring to ensure that the D.O. in the receiving stream is being maintained above the water quality standard; however, monitoring for D.O. in the discharge can provide valuable information for determining the impact of the discharge and developing future limitations, if necessary.

Water Quality Based Effluent Limits (WQBEL)

Biochemical Oxygen Demand (5-Day)

For this permit issuance, the Department developed a wasteload allocation to ensure the existing permitted load of BOD5 to the receiving stream would not cause a violation of in-stream water quality standards. The model used the highest allowable average load (14,461 lbs/day) and long-term average flow (8.05 MGD) to determine an average CBOD5 concentration of 214.5 mg/l. At this concentration, the model predicted that further assimilative capacity is available; therefore, no additional limitations are proposed for this permit issuance.

Toxicity Testing

The facility will continue to be required to perform whole effluent toxicity testing on an annual basis. Based on the results of the CORMIX model, the instream waste concentration is 15.2% and the limiting dilution is greater than 100:1; therefore, testing will be required on an acute basis at an Instream Waste Concentration (IWC) of 16%.

Numeric Reasonable Potential Analysis (RPA)

A numeric RPA was performed using analytical data submitted with the application for DSN001. No reasonable potential was shown for pollutants discharge at DSN001 to violate water quality standards; therefore, no additional limitations are proposed to be included in this permit issuance.

Federal Effluent Guideline Limitations (EGL)

The facility is subject to 40 CFR 430: Subparts F and J. A summary of the determination of effluent guideline limitations can be found in Attachment A to this rationale.

Biochemical Oxygen Demand (5-Day), Total Suspended Solids

The facility's discharge at DSN001 is subject to the effluent limitation guidelines found at 40 CFR 430.62 and 40 CFR 430.102, the sum of which provides production-based guidelines for determining allowable loadings. The current permit limitations have been continued since 1995 to avoid anti-backsliding.

Pentachlorophenol*, Trichlorophenol*

These parameters are regulated under Subpart B and Subpart J. 40 CFR Part 430.24(d) and 430.104 state that the effluent limitations shall apply unless the discharger certifies non-use of the compounds as biocides. Historically, calculated limitations based on effluent guidelines have been established for Pentachlorophenol and Trichlorophenol in the permit for the main process wastewater outfall. This permit issuance proposes zero discharge limitations for these parameters on the basis of historical non-use certifications submitted by the facility and the expected phase out of pentachlorophenol from the wood industry within the next few years. The requirement for the facility to submit a certification of non-use of chlorophenolic-containing biocides shall remain.

*In lieu of monitoring for these parameters, the facility can submit a certification of non-use by reporting *9 on the discharge monitoring report.

Stream Monitoring Requirements

The facility is required to conduct river monitoring surveys on a periodic basis for the period from June through September inclusive. The specific details of the river monitoring requirements can be found in Part IV.F of the permit.

Monitoring Frequency

The permittee requested to modify the in-stream monitoring period from June through September to July through September. The Department evaluated this request based on a review of historical in-stream monitoring data and the purpose of the seasonal monitoring requirements.

The in-stream monitoring program is intended to assess receiving stream conditions during critical seasonal periods when dissolved oxygen concentrations may be reduced due to elevated temperatures and low stream flows. While historical monitoring data indicate that dissolved oxygen concentrations during the month of June have generally remained above the applicable water quality criterion, the Department determined that June represents a transitional period when stream conditions may begin to decline and variability may increase.

Maintaining monitoring during this period provides additional assurance that potential changes in receiving stream conditions are identified and that continued protection of water quality standards is achieved. Therefore, the current monitoring period of June through September will be retained in this permit issuance.

316(b) Cooling Water Intake Structure Requirements

Section 316(b) of the Clean Water Act requires that facilities minimize adverse environmental impacts resulting from the operation of cooling water intake structures (CWIS) by using the "best technology available" (BTA). U.S. EPA has promulgated rules to implement these requirements under Phase I, Phase II, and Phase III of the rules; however, many facilities that operate intake structures do not fall into these categories and are therefore classified as miscellaneous facilities. For these miscellaneous facilities, a BTA determination must be made using BPJ.

The cooling water intake structure (CWIS) used by the permittee has been evaluated using available information. At this time, the Department has determined, using BPJ, 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) due to the actual through screen intake flow velocity being equal to 0.5 ft/s, the use of fish deflection technology (i.e. rotating screen) and the design intake flow is less than 5% of the mean annual flow.

The requirements that facilities must comply with are listed below:

1. The permittee shall submit the following information at least 180 days prior to expiration of this permit:
 - design in-take flow of the CWIS;

- percentage of in-take flow, based on highest monthly average in last 5 years, used for cooling purposes;
 - an estimate of the in-take 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;
 - through screen design in-take flow velocity;
 - 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; and,
 - a detailed description of any changes in the operation 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.
2. The permittee is required to operate and maintain the CWIS in a manner that minimizes impingement and entrainment levels. Documentation detailing the steps that have and are being taken to minimize the impingement and entrainment levels shall be maintained on site and made available upon request.
 3. The Permittee must keep records of all submissions that are part of the permit application pertaining to the CWIS until the subsequent permit is issued to the Permittee.
 4. Nothing in this Permit authorizes take for the purposes of a facility compliance with the Endangered Species Act.

DSN002

Discharges from this outfall include treated sanitary wastewater from the mill site at a rate of 7,000 GPD. Treatment for this discharge includes screening, grinding, activated sludge, and disinfection.

Biochemical Oxygen Demand (5-Day), Total Suspended Solids

Monthly average limitations for these parameters are based on secondary treatment standards. Daily maximum limitations were determined, based on Departmental policy, by multiplying the monthly average by a factor of 1.5.

pH

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(2)(e)2 – Specific Water Quality for Public Water Supply classified streams states: "Sewage, industrial waste or other wastes shall not cause the pH to deviate more than one unit from then normal or natural pH, nor be less than 6.0, nor greater than 8.5 standard units." Based on the low effluent flow to stream flow ratio, the discharge is not expected to have a significant effect on the pH of the receiving stream; therefore, it is proposed to continue the existing limitations of 6.0 to 9.0 S.U.

Total Residual Chlorine (TRC)

Chlorine is used in the disinfection process; therefore, monitoring for TRC will be continued in this permit issuance. The maximum TRC limitation is based on the maximum concentration allowed in the discharge which would not exceed the acute water quality criteria of 0.019 mg/L and in no cases would exceed 1.0 mg/L. Based on the calculations below, the TRC daily maximum limit of 1.0 mg/L is proposed to continue in this permit issuance.

Receiving Stream 1Q10: 2525 cfs = 1631.95 MGD

Average DSN002 Flow = 0.007 MGD

Daily Max TRC Limit =
$$\frac{(\text{Stream 1Q10} + \text{Average Industrial Flow}) \times \text{Acute WQ Criterion}}{\text{Average Industrial Flow}}$$

$$= \frac{(1631.95 \text{ MGD} + 0.007 \text{ MGD}) \times 0.019 \text{ mg/L}}{0.007 \text{ MGD}} \approx 4430 \text{ mg/L}$$

E. Coli

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(6)ii – Specific Water Quality Criteria for Swimming and Other Whole Body Water-Contact Sports, states that “ the bacterial quality of water is acceptable when a sanitary survey by the controlling authorities reveals no source of dangerous pollution and when the geometric mean E. coli organism density does not exceed 126 colonies/100 mL in non-coastal waters nor exceed a maximum of 235 colonies/100 ml in any sample in non-coastal waters.” Therefore, the existing limitations are proposed to be continued in this permit issuance.

Numeric Reasonable Potential Analysis (RPA)

A Numeric RPA was performed using analytical data submitted with the application for DSN002. No reasonable potential was shown for pollutants discharge at DSN002 to violate water quality standards; therefore, no additional limitations are proposed to be included in this permit issuance.

DSN005

Discharges from DSN005 include stormwater and landfill leachate*.

***DSN005 (Landfill Leachate)**

The facility discharges landfill leachate, which is regulated under 40 CFR 445, from the Lower Leachate Pond through outfall DSN005. 40 CFR 445.1(e) specifies that the regulations therein “do not apply to dischargers of landfill wastewater from landfills operated in conjunction with other industrial or commercial operations when the landfill only receives wastes generated by the industrial or commercial operations directly associated with the landfill.”

Flooded Conditions

DSN005's monitoring location is as far downstream of any treatment prior to comingling with a water of the state. The proposed location is at risk of being inaccessible during certain months of the year due to flooding; however, the proposed quarterly monitoring frequency should allow the facility to obtain a sample during each required reporting period. In the event a sample can not be obtained during a quarter, the facility shall obtain a sample at an alternative upstream sampling location.

pH, Biochemical Oxygen Demand (5-Day), Total Suspended Solids

Monitoring for these parameters will be continued to provide a measure of the effectiveness of the facility's BMP plans.

Oil & Grease

The daily maximum limitation will be continued in this permit issuance. The limitation is consistent with similar discharges, achievable with BMPs and has been shown to prevent the occurrence of a sheen in the receiving stream.

Water Quality Based Effluent Limits (Dissolved Arsenic, Available Cyanide)

A reasonable potential analysis was performed using analytical data submitted with the application for DSN005. While DSN005 is primarily a stormwater driven discharge, there is the potential for the outfall to discharge outside of storm events when stream flows may not be elevated.

Arsenic

Arsenic analytical results reported on EPA Form 2C were provided as total dissolved concentrations (0.00189 mg/L). For purposes of the reasonable potential analysis, a conversion ratio of 0.3 was applied to the reported total dissolved arsenic concentration to represent the more toxic trivalent form. The adjusted concentration of 0.000567 mg/L was determined to be the approximate trivalent arsenic value was used in the RPA calculations. The RPA calculations for DSN005 does not demonstrate reasonable potential to cause a violation of water quality standards.

Monitoring Frequency

The permittee has requested that the monitoring frequency for Dissolved Arsenic and Available Cyanide be reduced. Based on the facility's historical data and compliance history, the Department evaluated the request in conjunction with EPA's *Interim Guidance for Performance-Based Reduction of NPDES Monitoring Frequencies*.

Historical monitoring results for Available Cyanide indicate consistent non-detectable or very low concentrations with minimal variability and no recorded exceedances of permit limits. These results demonstrate stable performance and a low potential for variability in the discharge. Therefore, a reduction in monitoring frequency for Available Cyanide from once per quarter to semi-annually is being proposed.

Historical monitoring results for Dissolved Arsenic indicate measurable concentration; however, there have been no permit exceedances during the last permit cycle of 5 years and the ratio of long term effluent average to the permit limit is ~32%, therefore, a reduction in monitoring frequency for Dissolved Arsenic from once per quarter to semi-annually is being proposed.

Stormwater Monitoring (DSN006, DSN022, DSN025)

pH, Biochemical Oxygen Demand (5-Day), Total Suspended Solids

Monitoring for these parameters will be continued to provide a measure of the effectiveness of the facility's BMP plans.

Oil & Grease

The daily maximum limitation will be continued in this permit issuance. The limitation is consistent with similar discharges, achievable with BMPs and has been shown to prevent the occurrence of a sheen in the receiving stream.

DSN022

The DSN022 outfall conveys stormwater runoff primarily from non-industrial areas routed through a constructed wetlands. Site topography limits the potential for industrial runoff to enter this drainage area. Therefore, the discharge is not expected to be significantly impacted by industrial activities. The permittee's request to sample at the constructed wetlands as an alternative monitoring location during periods when the outfall is inaccessible is considered reasonable, as the location is representative of the discharge.

DSN023

The facility is authorized to discharge process discharges associated with exterior rail car washing operations and stormwater runoff from industrial activity through outfall DSN023. The discharge through DSN023A is required to be sampled when wash water is being discharged outside of a qualifying storm event. The facility has previously indicated that they do not use solvents or soaps in this rail car washing operation, and the discharge from the exterior rail car washing operations during a non-storm event does not produce enough volume to adequately obtain a sample. A footnote which requires that sampling at DSN023 occurs during a qualifying storm event will be continued.

DSN024

Discharges from this outfall was previously permitted under NPDES General Permit ALG060506 as DSN002-1. The discharge includes stormwater, and contact water from wet log storage operations. Discharges from the settling pond typically occur during and/or following a rain event.

A monitoring frequency of once per month is proposed for this permit issuance.

pH

40 CFR 429.101 (BPT) and 40 CFR 429.103 (BAT) require a daily minimum and maximum limitation of 6.0 and 9.0 S.U., respectively.

Biochemical Oxygen Demand (5-Day), Total Suspended Solids

Based on information available to the Department, monitoring for these parameters will continue to be monitored to assess the effectiveness of the facility's BMP plans and provide loading information to determine future limitations, if necessary.

Oil & Grease

The daily maximum limitation of 15 mg/L will be continued in this permit issuance. The limitation is consistent with similar discharges, achievable with BMPs and has been shown to prevent the occurrence of a sheen in the receiving stream.

Narrative Criteria

40 CFR 429.101 and 40 CFR 429.103 both require that there shall be no debris, as defined at 40 CFR 429.11(i), discharged.

303(d) List of Impaired Waters/Total Maximum Daily Load (TMDL)

None of the listed receiving streams the facility discharges to are listed on the most recent Alabama 303(d) List of Impaired Waters nor have any TMDLs been established.

Best Management Practices (BMP) Plan

Best Management Practices (BMPs) are believed to be the most effective way to control the contamination of stormwater from areas of industrial activities. This facility is required to maintain a BMP plan. The requirements of the BMP plan call for minimization of stormwater contact with waste materials, products and by-products, and for prevention of spills or loss of fluids from equipment maintenance activities. The effectiveness of the BMPs will be measured through the monitoring of the pollutants of concern.

The Department has updated the BMP language located in Part IV.A.2.g of the Permit. The Permit Condition now states "Provide for routine inspections, or 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. Routine inspections should be done at a frequency to ensure that the BMP is continually implemented and effective and in no case less frequent than once per year." This clarification was added to be consistent with 40 CFR Part 122.43(c).

June 23, 2026 Revision

The facility submitted comments on the draft renewal permit dated June 4, 2026. The response and/or revision to each request is addressed below.

Toxicity Testing Requirements

The facility commented that the toxicity testing requirements on Page 28 specified three 24-hr composite samples and a 95% confidence level, while the permit limits table identified grab sampling and the current permit used a 90% confidence level.

The Department reviewed the toxicity requirements and determined that language applicable to chronic toxicity testing had been inadvertently included. The permit has been revised to specify grab samples and a 90% confidence level, consistent with the acute toxicity testing requirements applicable to this discharge.

Pentachlorophenol and Trichlorophenol

EPA issued a Final Registration Review Decision (FD) for pentachlorophenol on December 22, 2021. The FD requires a nationwide phase-out of pentachlorophenol over five years, with use prohibited after February 28, 2027. Though it was noted that (1) utility poles and cross arms treated with pentachlorophenol may continue to be transported, sold, and installed after the phase-out, (2) existing pentachlorophenol-treated wood in service does not need to be replaced, and (3) trace amounts may persist in treatment systems and tanks during the transition to alternative chemistries, the FD also states that consultation with utility companies supported the fact that a 5-year phase-out period would be adequate for the transition.

The Department's protocol to address the phase out of pentachlorophenol is to impose zero discharge limitations for Pentachlorophenol and Trichlorophenol in paper mill permits where facilities have historically certified non-use of chlorophenolic-containing biocides and have indicated below detection results for Pentachlorophenol and Trichlorophenol on EPA Form 2C in the application. For facilities that do not use chlorophenolic-containing biocides, certification of non-use remains the applicable mechanism for demonstrating compliance, and therefore, the permit will continue to require certification of non-use, consistent with the requirements of 40 CFR Part 430.24(d) and 430.104. The final permit will retain a zero discharge limitation for Pentachlorophenol and Trichlorophenol. If the

facility decides to use a chlorophenolic-containing substance, the facility shall notify the Department prior to any discharge occurring.

Outfall DSN005Q

The facility requested that the monitoring frequency for Outfall DSN005Q be revised from quarterly to semiannual and aligned with the arsenic and cyanide monitoring requirements identified on Page 7. The facility noted that the monitoring frequency for this outfall was changed from semiannual to quarterly during the 2019 permit renewal to accommodate arsenic and cyanide monitoring.

The Department reviewed the historical monitoring requirements, available discharge data, and the basis for the quarterly monitoring frequency. The monitoring frequency for Outfall DSN005Q has been revised to semiannual.

Outfall DSN025 – Monitoring Requirements

The facility commented that Outfall DSN025 be removed from the monitoring requirements on Draft Permit Page 9 and added to the requirements on Draft Permit Page 8. The facility also requested that Footnote 6 be revised to include DSN025 because DSN024 is not representative of DSN025.

The Department reviewed the discharge characteristics and monitoring arrangements for Outfalls DSN024 and DSN025. The permit has been revised to list DSN025 separately on Page 7 in the Revised Draft Permit, and Footnote 6 has been revised to include DSN025. These revisions clarify that monitoring conducted at DSN024 is not considered representative of discharges from DSN025.

Outfall DSN024 – Monthly Sampling

The facility requested that the permit clarify that monthly sampling at DSN024 is required only when the wet deck pond overflows.

The Department reviewed the operating conditions associated with the wet deck pond and revised the permit to clarify that monthly sampling at DSN024 is required only during months in which the wet deck pond overflows and a discharge occurs through the outfall.

Permittee Name

The facility requested that “WestRock Mill Company, LLC” on Page 31 be replaced with “WestRock CP, LLC.” The Department revised the permit to reflect the correct legal name of the permittee.

Permit Limits Summary

<i>Pollutant</i>	<i>Daily Maximum (lbs/day)</i>	<i>Monthly Average (lbs/day)</i>	<i>Basis</i>
Current Permit			
BOD5 (Total)	28,902	14,461	1995 Permit Production
TSS (Total)	40,410	20,205	1995 Permit Production
Pentachlorophenol	2.58	-	1995 Permit Production
Trichlorophenol	0.98	-	1995 Permit Production
Renewal Application			
BOD5 (Subpart F)	26,811	13,406	January 2024 to December 2024 Production
BOD5 (Subpart J)	13,646	6,703	January 2024 to December 2024 Production
BOD5 (Total)	40,457	20,109	
TSS (Subpart F)	33,900	16,950	January 2024 to December 2024 Production
TSS (Subpart J)	22025	11012	January 2024 to December 2024 Production
TSS (Total)	55924	27962	
Pentachlorophenol	5.78	-	January 2024 to December 2024 Production
Trichlorophenol	2.0	-	January 2024 to December 2024 Production
Final Permit Limitations			
BOD5 (Total)	28,902	14,461	Current Permit
TSS (Total)	40,410	20,205	Current Permit
Pentachlorophenol	2.58*	-	Current Permit
Trichlorophenol	0.98*	-	Current Permit

* See Permit Rationale for further discussion

2025 Renewal Application

40 CFR 430 - Pulp and Paper Production Point Source Category

Subpart F - Semi-Chemical Subcategory

40 CFR 430.62 - Best Practicable Technology (BPT)/Best Conventional Technology (BCT)

BPT effluent limitations for sodium base mills

Production

1540.89 tons/day
3,081,780 lbs/day

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	8.7	4.35	26811	13406
TSS	11	5.5	33900	16950

*pH within the range of 6.0 to 9.0 S.U.

40 CFR 430.64

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)
Pentachlorophenol	0.0012	-	3.70	-
Trichlorophenol	0.00043	-	1.33	-

Subpart J - Secondary Fiber Non-Deink Subcategory

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

BPT effluent limitations for secondary fiber non-deink facilities where paperboard from wastepaper is produced - corrugating medium finish subdivision

Production

1197.00 tons/day
2,394,000 lbs/day

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	5.7	2.8	13646	6703
TSS	9.2	4.6	22025	11012

*pH within the range of 6.0 to 9.0 S.U.

40 CFR 430.104

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)
Pentachlorophenol	0.00087	-	2.08	-
Trichlorophenol	0.0003	-	0.72	-

Total Allocations

Pollutant	Daily Maximum	
	Daily Maximum (lbs/day)	Monthly Average (lbs/day)
BOD ₅	40457	20109
TSS	55924	27962
Pentachlorophenol**	5.78	-
Trichlorophenol**	2.04	-

*pH within the range of 5.0 to 9.0 S.U.

$Q_d * C_d + Q_{d2} * C_{d2} + Q_s * C_s = Q_r * C_r$							Enter Max Daily Discharge as reported by Applicant (C _d) Max	Enter Avg Daily Discharge as reported by Applicant (C _d) Avg	Partition Coefficient (Stream / Lake)
ID	Pollutant	Carbonogen "yes"	Type	Background from upstream source (C _{d2}) Daily Max	Background from upstream source (C _{d2}) Monthly Avg	Background Instream (C _s) Daily Max	Background Instream (C _s) Monthly Avg		
1	Antimony		Metals	0	0	0	0	1.56	1.56
2	Arsenic**	YES	Metals	0	0	0	0	4.06	4.06
3	Beryllium		Metals	0	0	0	0	0	0
4	Cadmium**		Metals	0	0	0	0	0	0
5	Chromium / Chromium III**		Metals	0	0	0	0	2.57	2.57
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0
7	Copper**	YES	Metals	0	0	0	0	4.88	4.88
8	Lead**		Metals	0	0	0	0	1.24	1.24
9	Mercury**		Metals	0	0	0	0	0	0
10	Nickel**		Metals	0	0	0	0	5.82	5.82
11	Selenium		Metals	0	0	0	0	0	0
12	Silver		Metals	0	0	0	0	0	0
13	Thallium		Metals	0	0	0	0	0	0
14	Zinc**		Metals	0	0	0	0	54.6	54.6
15	Organic		Metals	0	0	0	0	0	0
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0
17	Hardness (As CaCO ₃)		Metals	0	0	0	0	0	0
18	Acrolein		VOC	0	0	0	0	0	0
19	Acrylonitrile*	YES	VOC	0	0	0	0	0	0
20	Aldrin	YES	VOC	0	0	0	0	0	0
21	Benzene*	YES	VOC	0	0	0	0	0	0
22	Bromofen*	YES	VOC	0	0	0	0	0	0
23	Carbon Tetrachloride*	YES	VOC	0	0	0	0	0	0
24	Chlordane	YES	VOC	0	0	0	0	0	0
25	Glorobenzene		VOC	0	0	0	0	0	0
26	Chlorodibromo-Methane*	YES	VOC	0	0	0	0	0	0
27	Chloroethane		VOC	0	0	0	0	0	0
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0
29	ChloroForm*	YES	VOC	0	0	0	0	0	0
30	4,4'-DDD	YES	VOC	0	0	0	0	0	0
31	4,4'-DDE	YES	VOC	0	0	0	0	0	0
32	4,4'-DDT	YES	VOC	0	0	0	0	0	0
33	Dichlorobromo-Methane*	YES	VOC	0	0	0	0	0	0
34	1,1-Dichloroethene		VOC	0	0	0	0	0	0
35	1,2-Dichloroethane*	YES	VOC	0	0	0	0	0	0
36	Trans-1,2-Dichloro-Ethylene		VOC	0	0	0	0	0	0
37	1,1-Dichloroethylene*	YES	VOC	0	0	0	0	0	0
38	1,2-Dichloropropene		VOC	0	0	0	0	0	0
39	1,3-Dichloro-Propylene		VOC	0	0	0	0	0	0
40	Dieldrin	YES	VOC	0	0	0	0	0	0
41	Ethylbenzene		VOC	0	0	0	0	0	0
42	Methyl Bromide		VOC	0	0	0	0	0	0
43	Methyl Chloride		VOC	0	0	0	0	0	0
44	Methylene Chloride*	YES	VOC	0	0	0	0	0	0
45	1,1,1,2-Tetrachloro-Ethane*	YES	VOC	0	0	0	0	0	0
46	Tetrachloro-Ethylene*	YES	VOC	0	0	0	0	0	0
47	Toluene		VOC	0	0	0	0	0	0
48	Texaphene	YES	VOC	0	0	0	0	0	0
49	Tributyltin (TBT)	YES	VOC	0	0	0	0	0	0
50	1,1,1-Trichloroethane		VOC	0	0	0	0	0	0
51	1,1,2-Trichloroethane*	YES	VOC	0	0	0	0	0	0
52	Trichloroethylene*	YES	VOC	0	0	0	0	0	0
53	Vinyl Chloride*	YES	VOC	0	0	0	0	0	0
54	p-Chloro-m-Cresol		Acids	0	0	0	0	0	0
55	2-Chlorophenol		Acids	0	0	0	0	0	0
56	2,4-Dichlorophenol		Acids	0	0	0	0	0	0
57	2,4-Dimethylphenol		Acids	0	0	0	0	0	0
58	4,6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0
59	2,4-Dinitrophenol		Acids	0	0	0	0	0	0
60	4,6-Dinitro-2-methylphenol	YES	Acids	0	0	0	0	0	0
61	Dioxin (2,3,7,8-TCDD)	YES	Acids	0	0	0	0	0	0
62	2-Nitrophenol		Acids	0	0	0	0	0	0
63	4-Nitrophenol		Acids	0	0	0	0	0	0
64	Pentachlorophenol*	YES	Acids	0	0	0	0	0	0
65	Phenol		Acids	0	0	0	0	0	0
66	2,4,6-Trichlorophenol*	YES	Acids	0	0	0	0	0	0
67	Acanaphthene		Bases	0	0	0	0	0	0
68	Acanaphthylene		Bases	0	0	0	0	0	0
69	Anthracene		Bases	0	0	0	0	0	0
70	Benzidine		Bases	0	0	0	0	0	0
71	Benzo(A)Anthracene*	YES	Bases	0	0	0	0	0	0
72	Benzo(A)Pyrene*	YES	Bases	0	0	0	0	0	0
73	3,4-Benzo-Fluoranthene		Bases	0	0	0	0	0	0
74	Benzo(G,I)Fluorene		Bases	0	0	0	0	0	0
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0
77	Bis (2-Chloroethoxy) Ether*	YES	Bases	0	0	0	0	0	0
78	Bis (2-Chloro-Propyl) Ether		Bases	0	0	0	0	0	0
79	Bis (2-Ethylhexyl) Phthalate*	YES	Bases	0	0	0	0	0	0
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0
82	2-Chloronaphthalene		Bases	0	0	0	0	0	0
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0
84	Chrysene*	YES	Bases	0	0	0	0	0	0
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	0
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	0
87	Dibenzo(A,H)Anthracene*	YES	Bases	0	0	0	0	0	0
88	1,2-Dichlorobenzene		Bases	0	0	0	0	0	0
89	1,3-Dichlorobenzene		Bases	0	0	0	0	0	0
90	1,4-Dichlorobenzene		Bases	0	0	0	0	0	0
91	3,3-Dichlorobenzidine*	YES	Bases	0	0	0	0	0	0
92	Diethyl Phthalate		Bases	0	0	0	0	0	0
93	Dimethyl Phthalate		Bases	0	0	0	0	0	0
94	2,4-Dinitrotoluene*	YES	Bases	0	0	0	0	0	0
95	2,6-Dinitrotoluene		Bases	0	0	0	0	0	0
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	0
97	Endosulfan (alpha)	YES	Bases	0	0	0	0	0	0
98	Endosulfan (beta)	YES	Bases	0	0	0	0	0	0
99	Endosulfan sulfate	YES	Bases	0	0	0	0	0	0
100	Endrin	YES	Bases	0	0	0	0	0	0
101	Endrin Alderhyde	YES	Bases	0	0	0	0	0	0
102	Fluoranthene		Bases	0	0	0	0	0	0
103	Fluorene		Bases	0	0	0	0	0	0
104	Heptachlor	YES	Bases	0	0	0	0	0	0
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0
106	Hexachlorobenzene*	YES	Bases	0	0	0	0	0	0
107	Hexachlorobutadiene*	YES	Bases	0	0	0	0	0	0
108	Hexachlorocyclohexan (alpha)	YES	Bases	0	0	0	0	0	0
109	Hexachlorocyclohexan (beta)	YES	Bases	0	0	0	0	0	0
110	Hexachlorocyclohexan (gamma)	YES	Bases	0	0	0	0	0	0
111	Hexachlorocyclopentadiene		Bases	0	0	0	0	0	0
112	Hexachloroethane		Bases	0	0	0	0	0	0
113	Indeno(1,2,3-CD)Pyrene*	YES	Bases	0	0	0	0	0	0
114	Isophorone		Bases	0	0	0	0	0	0
115	Naphthalene		Bases	0	0	0	0	0	0
116	Nitrobenzene		Bases	0	0	0	0	0	0
117	N-Nitrosodi-N-Propylamine*	YES	Bases	0	0	0	0	0	0
118	N-Nitrosodi-N-Methylamine*	YES	Bases	0	0	0	0	0	0
119	N-Nitrosodi-N-Phenylamine*	YES	Bases	0	0	0	0	0	0
120	PCB-1016	YES	Bases	0	0	0	0	0	0
121	PCB-1221	YES	Bases	0	0	0	0	0	0
122	PCB-1232	YES	Bases	0	0	0	0	0	0
123	PCB-1242	YES	Bases	0	0	0	0	0	0
124	PCB-1248	YES	Bases	0	0	0	0	0	0
125	PCB-1254	YES	Bases	0	0	0	0	0	0
126	PCB-1260	YES	Bases	0	0	0	0	0	0
127	Phenanthrene		Bases	0	0	0	0	0	0
128	Pyrene		Bases	0	0	0	0	0	0
129	1,2,4-Trichlorobenzene		Bases	0	0	0	0	0	0

8.85	Enter Q _d = wastewater discharge flow from facility (MGD)
12.4551835	Q _d = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Q _{d2} = background stream flow in MGD above point of discharge
0	Q _{d2} = background stream flow from upstream source (cfs)
8678	Enter 7Q10, Q _s = background stream flow in cfs above point of discharge
2525	Enter or estimated, 1Q10, Q _s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
37156	Enter Mean Annual Flow, Q _s = background stream flow in cfs above point of discharge
9447	Enter TQ2, Q _s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Unit	Enter C _s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q _d + Q _{d2} + Q _s	Q _s = resultant in-stream flow, after discharge
Calculated on other	C _r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
100	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.80 s.u.	Enter, Background pH above point of discharge
YES	Enter, Is discharge to a stream? "YES" Other option would be to a Lake. (This changes the partition coefficients for the metals)

*** Using Partition Coefficients

June 28, 2008

Facility Name: Westrock Mill Company - Stevenson (DSN001)																			
NPDES No.: AL0022314																			
Freshwater F&W classification:				Freshwater Acute (µg/l) Q _a = 1Q10								Freshwater Chronic (µg/l) Q _a = 7Q10				Human Health Consumption Fish only (µg/l)			
																Carcinogen Q _a = Annual Average Non-Carcinogen Q _a = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background from upstream source (C _{d2}) Daily Max	Max Daily Discharge as reported by Applicant (C _{app})	Water Quality Criteria (C ₁)	Draft Permit Limit (C _{perm})	20% of Draft Permit Limit	RP?	Background from upstream source (C _{d2}) Monthly Ave	Avg Daily Discharge as reported by Applicant (C _{app})	Water Quality Criteria (C ₁)	Draft Permit Limit (C _{perm})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C ₁)	Draft Permit Limit (C _{perm})	20% of Draft Permit Limit	RP?
1	Antimony			0	1.56	-	-	-		0	1.56	-	-	-		3.03E-01	2.01E+05	4.01E+04	No
2	Arsenic		YES	0	4.08	-	-	-		0	4.08	-	-	-		3.03E-01	9.04E+02	1.81E+02	No
3	Beryllium			0	0	-	-	-		0	0	-	-	-		-	-	-	-
4	Cadmium			0	0	1.73E-03	120874.339	24134.868	No	0	0	1.73E-03	140373.315	28074.663	No	-	-	-	-
5	Chromium Chromium III			0	2.57	2719.158	582742.953	110548.591	No	0	2.57	2719.158	582742.953	110548.591	No	-	-	-	-
6	Chromium Chromium VI			0	0	1.63E-03	3250.627	650.125	No	0	0	1.63E-03	5008.781	1001.756	No	-	-	-	-
7	Copper			0	4.88	1.63E-03	7056.459	1411.292	No	0	4.88	1.63E-03	12308.681	2461.736	No	-	-	-	-
8	Lead			0	1.24	1.13E-03	63689.891	12737.738	No	0	1.24	1.13E-03	6562.355	1312.471	No	-	-	-	-
9	Mercury			0	0	9.66E-05	486.944	97.389	No	0	0	9.66E-05	8.446	1.69	No	4.34E-02	2.28E+01	4.56E+00	No
10	Nickel			0	5.62	1.13E-03	188895.288	37779.058	No	0	5.62	1.13E-03	55318.875	11063.735	No	9.93E+02	5.33E+05	1.07E+05	No
11	Selenium			0	0	1.13E-03	4074.534	814.907	No	0	0	1.13E-03	2885.808	577.162	No	1.31E+05	1.31E+05	2.61E+05	No
12	Silver			0	0	1.13E-03	655.339	131.068	No	0	0	1.13E-03	-	-	No	-	-	-	-
13	Thallium			0	0	-	-	-		0	0	-	-	-		1.47E+02	2.94E+01	-	-
14	Zinc			0	54.6	1.13E-03	72341.772	14468.354	No	0	54.6	1.13E-03	192302.303	38460.461	No	1.48E+04	8.00E+08	1.60E+08	No
15	Cyanide			0	0	1.13E-03	4461.987	892.397	No	0	0	1.13E-03	2793.242	558.648	No	5.01E+05	1.00E+05	-	-
16	Total Phenolic Compounds			0	0	-	-	-		0	0	-	-	-		-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-		0	0	-	-	-		-	-	-	-
18	Acrolein			0	0	-	-	-		0	0	-	-	-		-	-	-	-
19	Acrylonitrile		YES	0	0	-	-	-		0	0	-	-	-		2.91E+03	5.83E+02	-	-
20	Aldrin		YES	0	0	1.13E-03	611.180	122.236	No	0	0	1.13E-03	-	-	No	4.30E+02	8.60E+01	-	-
21	Benzene		YES	0	0	-	-	-		0	0	-	-	-		8.77E-02	1.75E-02	-	-
22	Bromoform		YES	0	0	-	-	-		0	0	-	-	-		4.82E+04	9.23E+03	-	-
23	Carbon Tetrachloride		YES	0	0	-	-	-		0	0	-	-	-		2.35E+05	4.70E+04	-	-
24	Chlordane		YES	0	0	1.13E-03	486.944	97.389	No	0	0	1.13E-03	2.310	0.462	No	2.88E+03	5.71E+02	-	-
25	Chlorobenzene			0	0	-	-	-		0	0	-	-	-		1.41E+00	2.82E-01	-	-
26	Chlorodibromo-Methane		YES	0	0	-	-	-		0	0	-	-	-		4.87E+05	9.73E+04	-	-
27	Chloroethane			0	0	-	-	-		0	0	-	-	-		2.21E+04	4.42E+03	-	-
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-		0	0	-	-	-		-	-	-	-
29	Chloroform		YES	0	0	-	-	-		0	0	-	-	-		3.04E+05	6.09E+04	-	-
30	4,4'-DDD		YES	0	0	-	-	-		0	0	-	-	-		5.41E-01	1.08E-01	-	-
31	4,4'-DDE		YES	0	0	-	-	-		0	0	-	-	-		3.82E-01	7.64E-02	-	-
32	4,4'-DDT		YES	0	0	1.100	224.089	44.820	No	0	0	0.001	0.537	0.107	No	3.82E-01	7.64E-02	-	-
33	Dichlorobromo-Methane		YES	0	0	-	-	-		0	0	-	-	-		2.98E+04	5.96E+03	-	-
34	1,1-Dichloroethane			0	0	-	-	-		0	0	-	-	-		-	-	-	-
35	1,2-Dichloroethane		YES	0	0	-	-	-		0	0	-	-	-		6.38E+04	1.28E+04	-	-
36	Trans-1,2-Dichloro-Ethylene			0	0	-	-	-		0	0	-	-	-		3.17E+05	6.35E+06	-	-
37	1,1-Dichloroethylene		YES	0	0	-	-	-		0	0	-	-	-		1.24E+07	2.48E+08	-	-
38	1,2-Dichloropropane			0	0	-	-	-		0	0	-	-	-		4.56E+03	9.13E+02	-	-
39	1,3-Dichloro-Propylene			0	0	-	-	-		0	0	-	-	-		6.80E+03	1.32E+03	-	-
40	Dieldrin		YES	0	0	1.13E-03	48.894	9.779	No	0	0	1.13E-03	30.081	6.016	No	9.32E-02	1.86E-02	-	-
41	Ethylbenzene			0	0	-	-	-		0	0	-	-	-		6.88E+05	1.34E+05	-	-
42	Methyl Bromide			0	0	-	-	-		0	0	-	-	-		4.88E+05	9.76E+04	-	-
43	Methyl Chloride			0	0	-	-	-		0	0	-	-	-		-	-	-	-
44	Methylene Chloride		YES	0	0	-	-	-		0	0	-	-	-		1.03E+05	2.06E+05	-	-
45	1,1,2,2-Tetrachloro-Ethane		YES	0	0	-	-	-		0	0	-	-	-		6.88E+03	1.38E+03	-	-
46	Tetrachloro-Ethylene		YES	0	0	-	-	-		0	0	-	-	-		5.72E+03	1.14E+03	-	-
47	Toluene			0	0	-	-	-		0	0	-	-	-		4.88E+05	9.76E+04	-	-
48	Toxaphene		YES	0	0	1.13E-03	148.720	29.744	No	0	0	1.13E-03	0.107	0.021	No	4.83E-01	9.66E-02	-	-
49	Tributyltin (TBT)		YES	0	0	1.13E-03	93.714	18.743	No	0	0	1.13E-03	36.676	7.335	No	-	-	-	-
50	1,1,1-Trichloroethane			0	0	-	-	-		0	0	-	-	-		-	-	-	-
51	1,1,2-Trichloroethane		YES	0	0	-	-	-		0	0	-	-	-		2.71E+04	5.43E+03	-	-
52	Trichloroethylene		YES	0	0	-	-	-		0	0	-	-	-		5.21E+04	1.04E+04	-	-
53	Vinyl Chloride		YES	0	0	-	-	-		0	0	-	-	-		4.25E+03	8.50E+02	-	-
54	p-Chloro-m-Cresol			0	0	-	-	-		0	0	-	-	-		-	-	-	-
55	2-Chlorophenol			0	0	-	-	-		0	0	-	-	-		4.68E+04	9.36E+03	-	-
56	2,4-Dichlorophenol			0	0	-	-	-		0	0	-	-	-		9.24E+04	1.85E+04	-	-
57	2,4-Dimethylphenol			0	0	-	-	-		0	0	-	-	-		2.87E+05	5.74E+04	-	-
58	4,6-Dinitro-O-Cresol			0	0	-	-	-		0	0	-	-	-		-	-	-	-
59	2,4-Dinitrophenol			0	0	-	-	-		0	0	-	-	-		1.87E+06	3.74E+05	-	-
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-		0	0	-	-	-		4.94E+05	9.87E+04	-	-
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-		0	0	-	-	-		7.95E-05	1.59E-05	-	-
62	2-Nitrophenol			0	0	-	-	-		0	0	-	-	-		-	-	-	-
63	4-Nitrophenol			0	0	-	-	-		0	0	-	-	-		-	-	-	-
64	Pentachlorophenol		YES	0	0	1.13E-03	1777.173	355.435	No	0	0	1.13E-03	3595.001	719.000	No	1.17E+05	5.28E+03	1.08E+03	No
65	Phenol			0	0	-	-	-		0	0	-	-	-		2.68E+08	5.37E+07	-	-
66	2,4,6-Trichlorophenol		YES	0	0	-	-	-		0	0	-	-	-		4.22E+03	8.44E+02	-	-
67	Acenaphthene			0	0	-	-	-		0	0	-	-	-		3.11E+05	6.22E+04	-	-
68	Acenaphthylene			0	0	-	-	-		0	0	-	-	-		-	-	-	-
69	Anthracene			0	0	-	-	-		0	0	-	-	-		1.25E+07	2.51E+08	-	-
70	Benzo(a)anthracene			0	0	-	-	-		0	0	-	-	-					

[illegible]

Facility Name: **Westrock Mill Company - Stevenson (DSN002)**NPDES No.: **AL0022314**

6/13/2017

$Q_{d1} * C_{d1} + Q_{d2} * C_{d2} + Q_s * C_s = Q_r * C_r$										Enter Max Daily Discharge as reported by Applicant (C _d) Max	Enter Avg Daily Discharge as reported by Applicant (C _d) Avg	Partition Coefficient (lb/lb)
ID	Pollutant	Carcinogen Yes*	Type	Background from upstream source (C _{d2}) Daily Avg	Background from upstream source (C _{d2}) Daily Avg	Background Instream (C _s) Daily Avg	Background Instream (C _s) Monthly Avg	Background Instream (C _s) Daily Avg	Background Instream (C _s) Monthly Avg	µg/l	µg/l	
1	Antimony		Metals	0	0	0	0	0	0	0	0	-
2	Arsenic**	YES	Metals	0	0	0	0	2.13	2.13	0.574	0.574	-
3	Beryllium		Metals	0	0	0	0	0	0	0	0	-
4	Cadmium**		Metals	0	0	0	0	0	0	0.236	0.236	-
5	Chromium / Chromium III**		Metals	0	0	0	0	0	0	0.210	0.210	-
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	0	0	-
7	Copper**		Metals	0	0	0	0	1.33	1.33	0.368	0.368	-
8	Lead**		Metals	0	0	0	0	0	0	0.206	0.206	-
9	Mercury**		Metals	0	0	0	0	0	0	0.302	0.302	-
10	Nickel**		Metals	0	0	0	0	2.39	2.39	0.505	0.505	-
11	Selenium		Metals	0	0	0	0	0	0	0	0	-
12	Silver		Metals	0	0	0	0	0	0	0	0	-
13	Thallium		Metals	0	0	0	0	0	0	0	0	-
14	Zinc**		Metals	0	0	0	0	20.9	20.9	0.330	0.330	-
15	Cyanide		Metals	0	0	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0	0	0	-
17	Hardness (As CaCO3)		Metals	0	0	0	0	0	0	0	0	-
18	Acrolein		VOC	0	0	0	0	1.86	1.86	0	0	-
19	Acrylonitrile*	YES	VOC	0	0	0	0	0	0	0	0	-
20	Alkyltin	YES	VOC	0	0	0	0	0	0	0	0	-
21	Benzene**	YES	VOC	0	0	0	0	0	0	0	0	-
22	Bromoform*	YES	VOC	0	0	0	0	0	0	0	0	-
23	Carbon Tetrachloride*	YES	VOC	0	0	0	0	0	0	0	0	-
24	Chlordane	YES	VOC	0	0	0	0	0	0	0	0	-
25	Chlorobenzene		VOC	0	0	0	0	0	0	0	0	-
26	Chlorodibromomethane*	YES	VOC	0	0	0	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	0	0	-
29	Chloroform*	YES	VOC	0	0	0	0	10.6	10.6	0	0	-
30	4,4'-DDD	YES	VOC	0	0	0	0	0	0	0	0	-
31	4,4'-DDE	YES	VOC	0	0	0	0	0	0	0	0	-
32	4,4'-DDT	YES	VOC	0	0	0	0	0	0	0	0	-
33	Dichlorobromomethane*	YES	VOC	0	0	0	0	1.55	1.55	0	0	-
34	1,1-Dichloroethane		VOC	0	0	0	0	0	0	0	0	-
35	1,2-Dichloroethane*	YES	VOC	0	0	0	0	0	0	0	0	-
36	Trans-1, 2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	0	0	-
37	1,1-Dichloroethene*	YES	VOC	0	0	0	0	0	0	0	0	-
38	1,2-Dichloropropane		VOC	0	0	0	0	0	0	0	0	-
39	1,3-Dichloro-Propylene		VOC	0	0	0	0	0	0	0	0	-
40	Dieldrin	YES	VOC	0	0	0	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	4.05	4.05	0	0	-
44	Methylene Chloride*	YES	VOC	0	0	0	0	0	0	0	0	-
45	1, 1, 2, 2-Tetrachloro-Ethane*	YES	VOC	0	0	0	0	0	0	0	0	-
46	Tetrachloro-Ethylene*	YES	VOC	0	0	0	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	0	0	0	-
48	Toxaphene	YES	VOC	0	0	0	0	0	0	0	0	-
49	Tributyltin (TBT)	YES	VOC	0	0	0	0	0	0	0	0	-
50	1, 1, 1-Trichloroethane		VOC	0	0	0	0	0	0	0	0	-
51	1, 1, 2-Trichloroethane*	YES	VOC	0	0	0	0	0	0	0	0	-
52	Trichloroethylene*	YES	VOC	0	0	0	0	0	0	0	0	-
53	Vinyl Chloride*	YES	VOC	0	0	0	0	0	0	0	0	-
54	p-Chloro-M-Cresol		Acids	0	0	0	0	0	0	0	0	-
55	2-Chlorophenol		Acids	0	0	0	0	0	0	0	0	-
56	2,4-Dichlorophenol		Acids	0	0	0	0	0	0	0	0	-
57	4-Methylphenol		Acids	0	0	0	0	0	0	0	0	-
58	4,6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0	0	0	-
59	2,4-Dinitrophenol		Acids	0	0	0	0	0	0	0	0	-
60	4,6-Dinitro-2-methylphenol	YES	Acids	0	0	0	0	0	0	0	0	-
61	Dioxin (2,3,7,8-TCDD)	YES	Acids	0	0	0	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	0	0	0	-
64	Pentachlorophenol*	YES	Acids	0	0	0	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	0	0	0	-
66	2,4,6-Trichlorophenol*	YES	Acids	0	0	0	0	0	0	0	0	-
67	Acenaphthene		Bases	0	0	0	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	0	0	0	-
70	Benzo(a)anthracene		Bases	0	0	0	0	0	0	0	0	-
71	Benzo(a)anthracene*	YES	Bases	0	0	0	0	0	0	0	0	-
72	Benzo(a)pyrene*	YES	Bases	0	0	0	0	0	0	0	0	-
73	3,4-Benzo-Fluoranthene		Bases	0	0	0	0	0	0	0	0	-
74	Benzo(ghi)perylene		Bases	0	0	0	0	0	0	0	0	-
75	Benzo(k)fluoranthene		Bases	0	0	0	0	0	0	0	0	-
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	0	0	-
77	Bis (2-Chloroethyl) Ether*	YES	Bases	0	0	0	0	0	0	0	0	-
78	Bis (2-Chloro-Propyl) Ether		Bases	0	0	0	0	0	0	0	0	-
79	Bis (2-Ethylhexyl) Phthalate*	YES	Bases	0	0	0	0	0	0	0	0	-
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0	0	0	-
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0	0	0	-
82	4-Chlorophthalate		Bases	0	0	0	0	0	0	0	0	-
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0	0	0	-
84	Chrysene*	YES	Bases	0	0	0	0	0	0	0	0	-
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	0	0	0	-
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	0	0	0	-
87	Dibenz(a,h)anthracene*	YES	Bases	0	0	0	0	0	0	0	0	-
88	1,2-Dichlorobenzene		Bases	0	0	0	0	0	0	0	0	-
89	1,3-Dichlorobenzene		Bases	0	0	0	0	0	0	0	0	-
90	1,4-Dichlorobenzene		Bases	0	0	0	0	0	0	0	0	-
91	3,3-Dichlorobenzidine*	YES	Bases	0	0	0	0	0	0	0	0	-
92	Diethyl Phthalate		Bases	0	0	0	0	0	0	0	0	-
93	Dimethyl Phthalate		Bases	0	0	0	0	0	0	0	0	-
94	2,4-Dinitrotoluene*	YES	Bases	0	0	0	0	0	0	0	0	-
95	2,6-Dinitrotoluene		Bases	0	0	0	0	0	0	0	0	-
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	0	0	0	-
97	Endosulfan (alpha)	YES	Bases	0	0	0	0	0	0	0	0	-
98	Endosulfan (beta)	YES	Bases	0	0	0	0	0	0	0	0	-
99	Endosulfan sulfate	YES	Bases	0	0	0	0	0	0	0	0	-
100	Endrin	YES	Bases	0	0	0	0	0	0	0	0	-
101	Endrin Aldehyde	YES	Bases	0	0	0	0	0	0	0	0	-
102	Fluoranthene		Bases	0	0	0	0	0	0	0	0	-
103	Fluorene		Bases	0	0	0	0	0	0	0	0	-
104	Heptachlor	YES	Bases	0	0	0	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	0	0	-
106	Hexachlorobenzene*	YES	Bases	0	0	0	0	0	0	0	0	-
107	Hexachlorobenzene*	YES	Bases	0	0	0	0	0	0	0	0	-
108	Hexachlorocyclohexan (alpha)	YES	Bases	0	0	0	0	0	0	0	0	-
109	Hexachlorocyclohexan (beta)	YES	Bases	0	0	0	0	0	0	0	0	-
110	Hexachlorocyclohexan (gamma)	YES	Bases	0	0	0	0	0	0	0	0	-
111	Hexachlorocyclopentadiene		Bases	0	0	0	0	0	0	0	0	-
112	Hexachloroethane		Bases	0	0	0	0	0	0	0	0	-
113	Indene(1, 2, 3-CK)Pyrene*	YES	Bases	0	0	0	0	0	0	0	0	-
114	Isophthone		Bases	0	0	0	0	0	0	0	0	-
115	Naphthalene		Bases	0	0	0	0	0	0	0	0	-
116	Nitrobenzene		Bases	0	0	0	0	0	0	0	0	-
117	N-Nitrosodi-N-Propylamine*	YES	Bases	0	0	0	0	0	0	0	0	-
118	N-Nitrosodi-N-Methylamine*	YES	Bases	0	0	0	0	0	0	0	0	-
119	N-Nitrosodi-N-Phenylamine*	YES	Bases	0	0	0	0	0	0	0	0	-
120	PCB-1016	YES	Bases	0	0	0	0	0	0	0	0	-
121	PCB-1221	YES	Bases	0	0	0	0	0	0	0	0	-
122	PCB-1232	YES	Bases	0	0	0	0	0	0	0	0	-
123	PCB-1242	YES	Bases	0	0	0	0	0	0	0	0	-
124	PCB-1248	YES	Bases	0	0	0	0	0	0	0	0	-
125	PCB-1254	YES	Bases	0	0	0	0	0	0	0	0	-
126	PCB-1260	YES	Bases	0	0	0	0	0	0	0	0	-
127	Phenanthrene		Bases	0	0	0	0	0	0	0	0	-
128	Pyrene		Bases	0	0	0	0	0	0	0	0	-
129	1, 2, 4-Trichlorobenzene		Bases	0	0	0	0	0	0	0	0	-

0.007	Enter Q _d = wastewater discharge flow from facility (MGD)
0.0108306	Q _d = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Q _{d2} = background stream flow in MGD above point of discharge
0	Q _{d2} = background stream flow from upstream source (cfs)
6678	Enter 7Q10, Q _s = background stream flow in cfs above point of discharge
2525	Enter or estimated, 1Q10, Q _s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
37156	Enter Mean Annual Flow, Q _s = background stream flow in cfs above point of discharge
9447	Enter 7Q2, Q _s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter in Let	Enter C _s = background in-stream pollutant concentration in µ

Freshwater F&W classification:				Max Daily Discharge as reported by Applicant (C _{max})		Freshwater Acute (µg/l) Q ₁₀ = 1Q10				Avg Daily Discharge as reported by Applicant (C _{avg})		Freshwater Chronic (µg/l) Q ₁₀ = 7Q10				Human Health Consumption Fish only (µg/l)			
ID	Pollutant	RP?	Carcinogen yes	Background from upstream source (C ₂₅) Daily Max		Water Quality Criteria (C ₁)	Draft Permit Limit (C _{max})	20% of Draft Permit Limit	RP?			Water Quality Criteria (C ₁)	Draft Permit Limit (C _{max})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C ₁)	Draft Permit Limit (C _{max})	20% of Draft Permit Limit	RP?
1	Antimony			0	0					0									
2	Arsenic		YES	0	2.13		138094807.823	27618979.565	No	0	2.13		161129505.849	32225810.170	No	3.03E-01	2.30E+08	4.60E+07	No
3	Beryllium			0	0					0									
4	Cadmium			0	0		1989298.241	397859.248	No	0			642704.184	128540.837	No				
5	Chromium/ Chromium III			0	0		632536978.098	126507395.220	No	0			217609825.100	43521985.020	No				
6	Chromium/ Chromium VI			0	0		3730186.867	746037.377	No	0			6782458.847	1356481.789	No				
7	Copper			0	1.33		8075129.515	1615025.903	No	0	1.33		14231962.194	2846392.438	No				
8	Lead			0	0		73088781.182	14617796.232	No	0			7532671.003	1506534.201	No				
9	Mercury			0	0		559528.033	111905.807	No	0			7399.046	1479.809	No	4.24E-02	2.62E+04	5.23E+03	No
10	Nickel			0	2.39		218164229.018	43232845.804	No	0			83498148.199	16699629.640	No	6.12E+08	1.22E+08	9.93E+02	No
11	Selenium			0	0		4962733.609	992467.222	No	0			3062935.840	612587.168	No	1.50E+09	3.00E+08		No
12	Silver			0	0		749944.110	149988.822	No	0									
13	Thallium			0	0					0									
14	Zinc			0	20.9		82785036.835	16557007.327	No	0	20.9		220736310.495	44147262.099	No	1.48E+04	9.18E+09	1.84E+08	No
15	Cyanide			0	0		5126008.970	1025801.394	No	0			3206253.273	641250.655	No	5.75E+09	1.15E+08		No
16	Total Phenolic Compounds			0	0					0									
17	Hardness (As CaCO3)			0	0					0									
18	Acrolein			0	1.88					1.88									
19	Acrylonitrile	YES		0	0														
20	Aldrin			0	0		899410.041	138882.008	No	0									
21	Benzene	YES		0	0					0									
22	Bromoform	YES		0	0					0									
23	Carbon Tetrachloride	YES		0	0					0									
24	Chlordane	YES		0	0		559528.033	111905.807	No	0			2651.325	530.265	No				
25	Chlorobenzene			0	0					0									
26	Chlorodibromo-Methane	YES		0	0					0									
27	Chloroethane			0	0					0									
28	2-Chloro-Ethylvinyl Ether			0	0					0									
29	Chloroform	YES		0	10.8					10.8									
30	4,4' - DDD	YES		0	0					0									
31	4,4' - DDE	YES		0	0					0									
32	4,4' - DDT	YES		0	0	1.100	258450.348	51280.070	No	0		0.001	616.587	123.317	No	1.09E+04	4.39E+02	8.78E+01	No
33	Dichlorobromo-Methane	YES		0	1.55					1.55									
34	1,1-Dichloroethane			0	0					0									
35	1,2-Dichloroethane	YES		0	0					0									
36	Trans-1,2-Dichloro-Ethylene			0	0					0									
37	1,1-Dichloroethylene	YES		0	0					0									
38	1,2-Dichloropropane			0	0					0									
39	1,3-Dichloro-Propylene			0	0					0									
40	Dieldrin	YES		0	0		55952.803	11180.561	No	0			34528.881	6905.776	No	1.07E+02	1.07E+02	2.14E+01	No
41	Ethylbenzene			0	0					0									
42	Methyl Bromide			0	0					0									
43	Methyl Chloride			0	4.05					4.05									
44	Methylene Chloride	YES		0	0					0									
45	1,1,2,2-Tetrachloro-Ethane	YES		0	0					0									
46	Tetrachloro-Ethylene	YES		0	0					0									
47	Toluene			0	0					0									
48	Toxaphene	YES		0	0		170189.777	34037.955	No	0			123.317	24.663	No	3.10E+04	5.58E+02	1.11E+02	No
49	Tributyltin (TBT)	YES		0	0		107242.873	21448.575	No	0			44394.276	8878.855	No				
50	1,1,1-Trichloroethane			0	0					0									
51	1,1,2-Trichloroethane	YES		0	0					0									
52	Trichloroethylene	YES		0	0					0									
53	Vinyl Chloride	YES		0	0					0									
54	p-Chloro-m-Cresol			0	0					0									
55	2-Chlorophenol			0	0					0									
56	2,4-Dichlorophenol			0	0					0									
57	2,4-Dimethylphenol			0	0					0									
58	4,6-Dinitro-o-Cresol			0	0					0									
59	2,4-Dinitrophenol			0	0					0									
60	4,6-Dinitro-2-methylphenol	YES		0	0					0									
61	Dioxin (2,3,7,8-TCDD)	YES		0	0					0									
62	Nitrophenol			0	0					0									
63	4-Nitrophenol			0	0					0									
64	Pentachlorophenol	YES		0	0		2033728.072	406745.214	No	0			4126561.218	825312.244	No	1.71E+04	6.05E+08	1.21E+08	No
65	Phenol			0	0					0									
66	2,4,6-Trichlorophenol	YES		0	0					0									
67	Acenaphthene			0	0					0									
68	Acenaphthylene			0	0					0									
69	Anthracene			0	0					0									
70	Benzo(a)Anthracene	YES		0	0					0									
71	Benzo(a)Pyrene	YES		0	0					0									
72	Benzo(b)fluoranthene			0	0					0									
73	Benzo(g)H)Perylene			0	0					0									
74	Benzo(k)Fluoranthene			0	0					0									
75	Bis (2-Chloroethoxy) Methane	YES		0	0					0									
76	Bis (2-Chloroethoxy) Ether			0	0					0									
77	Bis (2-Chloroethoxy) Propyl Ether			0	0					0									
78	Bis (2-Ethylhexyl) Phthalate	YES		0	0					0									
79	4-Bromophenyl Phenyl Ether			0	0					0									
80	Butyl Benzyl Phthalate			0	0					0									
81	2-Chloronaphthalene			0	0					0									
82	4-Chlorophenyl Phenyl Ether			0	0					0									
83	Chrysene	YES		0	0					0									
84	Di-n-Butyl Phthalate			0	0					0									
85	Di-n-Octyl Phthalate			0	0					0									
86	Dibenz(a,h)Anthracene	YES		0	0					0									
87	1,2-Dichlorobenzene			0	0					0									
88	1,3-Dichlorobenzene			0	0					0									
89	1,4-Dichlorobenzene			0	0					0									
90	3,3-Dichlorobenzidine	YES		0	0					0									
91	Diethyl Phthalate			0	0					0									
92	Dimethyl Phthalate			0	0					0									
93	2,4-Dinitrotoluene	YES		0	0					0									
94	2,6-Dinitrotoluene			0	0					0									
95	1,2-Diphenylhydrazine			0	0					0									
96	Endosulfan (alpha)	YES		0	0		51290.070	10258.014	No	0			34528.881	6905.776	No	1.71E+04	6.05E+08	1.21E+08	No
97	Endosulfan (beta)	YES		0	0		51290.070	10258.014	No	0			34528.881	6905.776	No	1.71E+04	6.05E+08	1.21E+08	No
98	Endosulfan sulfate	YES		0	0					0									
99	Endrin	YES		0	0		20049.755	4009.951	No	0			22197.138	4439.428	No	1.71E+04	6.05E+08	1.21E+08	No
100	Endrin Aldehyde	YES		0	0					0									
101	Fluoranthene			0	0														

Freshwater PWS classification:		Max Daily Discharge as reported by Applicant (C _{max})		Freshwater Acute (µg/l) C _a = 1G10		Avg Daily Discharge as reported by Applicant (C _{avg})		Freshwater Chronic (µg/l) C _c = 7G10		Human Health Consumption Fish & Water (µg/l) Carcinogen C _c = Annual Average Non-Carcinogen C _c = 7G10		Human Health Consumption Fish & Water (µg/l) Carcinogen C _c = Annual Average Non-Carcinogen C _c = 7G10			
ID	Pollutant	RP?	Carcinogen yes	Background (µm) (C _{max})	Water Quality Criteria (C _a)	Draft Permit Limit (C _{max})	30% of Draft Permit Limit	RP?	Background (µm) (C _{avg})	Water Quality Criteria (C _c)	Draft Permit Limit (C _c)	30% of Draft Permit Limit	RP?		
1	Antimony		YES	0	0	592.334	13004897.823	2761897.56	No	0	2.13	281.324	18112090.849	32225010.17	No
2	Arsenic		YES	0	2.13	592.334	13004897.823	2761897.56	No	0	2.13	281.324	18112090.849	32225010.17	No
3	Beryllium		YES	0	0	8.533	1869296.241	397859.243	No	0	0	1.042	842704.164	128540.8369	No
4	Cadmium		YES	0	0	2713.159	632336978.096	12607395.2	No	0	0	352.926	21709825.100	4321195.02	No
5	Chromium/Chromium III		YES	0	0	16.000	3730186.887	746037.3774	No	0	0	11.000	8752456.847	1356401.789	No
6	Chromium/Chromium VI		YES	0	1.33	34.637	8075129.515	1615025.903	No	0	1.33	23.002	1423192.184	2846392.439	No
7	Copper		YES	0	0	315.502	7308781.182	1461775.23	No	0	0	12.217	7532671.003	1505534.201	No
8	Lead		YES	0	0	2.400	559528.033	111905.8088	No	0	0	0.012	7399.046	1479.80203	No
9	Mercury		YES	0	2.39	927.200	216164229.018	43232645.8	No	2.39	102.983	63486148.199	12699629.84	No	
10	Nickel		YES	0	0	20.000	4662733.809	932546.7218	No	0	0	5.000	3082935.840	616587.1878	No
11	Selenium		YES	0	0	3.217	748944.110	149898.8219	No	0	0	0	0	0	No
12	Silver		YES	0	0	355.092	82785036.635	16557007.33	No	20.9	357.987	220736310.495	44147262.1	No	
13	Thallium		YES	0	0	22.000	5129006.970	1025801.394	No	0	0	5.200	3208253.273	641250.8548	No
14	Zinc		YES	0	0	0	0	0	No	0	0	0	0	0	No
15	Cyanide		YES	0	0	0	0	0	No	0	0	0	0	0	No
16	Total Phenolic Compounds		YES	0	0	0	0	0	No	0	0	0	0	0	No
17	Hardness (As CaCO ₃)		YES	0	1.88	0	0	0	No	1.88	0	0	0	0	No
18	Acrolein		YES	0	0	0	0	0	No	0	0	0	0	0	No
19	Acrylonitrile		YES	0	0	3.000	689410.041	139882.0083	No	0	0	0	0	0	No
20	Alkyl		YES	0	0	0	0	0	No	0	0	0	0	0	No
21	Benzene		YES	0	0	0	0	0	No	0	0	0	0	0	No
22	Bromoforn		YES	0	0	0	0	0	No	0	0	0	0	0	No
23	Carbon Tetrachloride		YES	0	0	0	0	0	No	0	0	0	0	0	No
24	Chlordane		YES	0	0	2.400	559528.033	111905.8088	No	0	0	0.0043	2851.325	530.264844	No
25	Chlordane		YES	0	0	0	0	0	No	0	0	0	0	0	No
26	Chlorodibromomethane		YES	0	0	0	0	0	No	0	0	0	0	0	No
27	Chloroethane		YES	0	0	0	0	0	No	0	0	0	0	0	No
28	2-Chloro-Ethylvinyl Ether		YES	0	0	0	0	0	No	0	0	0	0	0	No
29	Chloroform		YES	0	10.8	0	0	0	No	10.8	0	0	0	0	No
30	4,4'-DDD		YES	0	0	0	0	0	No	0	0	0	0	0	No
31	4,4'-DDE		YES	0	0	0	0	0	No	0	0	0	0	0	No
32	4,4'-DDT		YES	0	0	1.100	256450.346	51290.0897	No	0	0.001	616.587	123.3174336	No	
33	Dichlorobromo-Methane		YES	0	1.55	0	0	0	No	1.55	0	0	0	0	No
34	1,1-Dichloroethane		YES	0	0	0	0	0	No	0	0	0	0	0	No
35	1,2-Dichloroethane		YES	0	0	0	0	0	No	0	0	0	0	0	No
36	Trans-1,2-Dichloro-Ethylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
37	1,1-Dichloroethylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
38	1,2-Dichloroethylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
39	1,3-Dichloro-Propylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
40	Dieldrin		YES	0	0.240	55952.803	11190.58088	No	0	0.056	34528.881	6905.778281	No		
41	Ethylbenzene		YES	0	0	0	0	0	No	0	0	0	0	0	No
42	Methyl Bromide		YES	0	0	0	0	0	No	0	0	0	0	0	No
43	Methyl Chloride		YES	0	4.05	0	0	0	No	4.05	0	0	0	0	No
44	Methylene Chloride		YES	0	0	0	0	0	No	0	0	0	0	0	No
45	1,1,2,2-Tetrachloro-Ethane		YES	0	0	0	0	0	No	0	0	0	0	0	No
46	Tetrachloro-Ethylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
47	Toluene		YES	0	0	0	0	0	No	0	0	0	0	0	No
48	Toxaphene		YES	0	0.730	170189.777	34037.95534	No	0	0.0002	123.317	24.66548872	No		
49	Tricubutyl (TBT)		YES	0	0.460	107242.873	21448.5746	No	0	0.072	43484.278	8678.855218	No		
50	1,1,1-Trichloroethane		YES	0	0	0	0	0	No	0	0	0	0	0	No
51	1,1,2-Trichloroethane		YES	0	0	0	0	0	No	0	0	0	0	0	No
52	Trichloroethylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
53	Vinyl Chloride		YES	0	0	0	0	0	No	0	0	0	0	0	No
54	p-Chloro-M-Cresol		YES	0	0	0	0	0	No	0	0	0	0	0	No
55	2-Chlorophenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
56	2,4-Dichlorophenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
57	2,4-Dimethylphenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
58	4,6-Dinitro-O-Cresol		YES	0	0	0	0	0	No	0	0	0	0	0	No
59	2,4-Dinitrophenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
60	4,6-Dinitro-2-methylphenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	0	0	0	No	0	0	0	0	0	No
62	2-Nitrophenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
63	4-Nitrophenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
64	Pentachlorophenol		YES	0	0	8.723	2033728.072	406745.2144	No	0	8.693	412691.218	825312.2436	No	
65	Phenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
66	2,4,6-Trichlorophenol		YES	0	0	0	0	0	No	0	0	0	0	0	No
67	Acenaphthene		YES	0	0	0	0	0	No	0	0	0	0	0	No
68	Acenaphthylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
69	Anthracene		YES	0	0	0	0	0	No	0	0	0	0	0	No
70	Benzo(a)Anthracene		YES	0	0	0	0	0	No	0	0	0	0	0	No
71	Benzo(a)Pyrene		YES	0	0	0	0	0	No	0	0	0	0	0	No
72	Benzo(b)fluoranthene		YES	0	0	0	0	0	No	0	0	0	0	0	No
73	Benzo(k)fluoranthene		YES	0	0	0	0	0	No	0	0	0	0	0	No
74	Benzo(g,h,i)Perylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
75	Benzo(a)Pyrene		YES	0	0	0	0	0	No	0	0	0	0	0	No
76	Benzo(a)Pyrene		YES	0	0	0	0	0	No	0	0	0	0	0	No
77	Benzo(a)Pyrene		YES	0	0	0	0	0	No	0	0	0	0	0	No
78	Benzo(a)Pyrene		YES	0	0	0	0	0	No	0	0	0	0	0	No
79	Benzo(a)Pyrene		YES	0	0	0	0	0	No	0	0	0	0	0	No
80	4-Bromophenyl Phenyl Ether		YES	0	0	0	0	0	No	0	0	0	0	0	No
81	Butyl Benzyl Phthalate		YES	0	0	0	0	0	No	0	0	0	0	0	No
82	2-Chlorophenyl Phenyl Ether		YES	0	0	0	0	0	No	0	0	0	0	0	No
83	4-Chlorophenyl Phenyl Ether		YES	0	0	0	0	0	No	0	0	0	0	0	No
84	Chrysene		YES	0	0	0	0	0	No	0	0	0	0	0	No
85	Di-N-Butyl Phthalate		YES	0	0	0	0	0	No	0	0	0	0	0	No
86	Di-N-Octyl Phthalate		YES	0	0	0	0	0	No	0	0	0	0	0	No
87	Benzo(a,h,i)Perylene		YES	0	0	0	0	0	No	0	0	0	0	0	No
88	1,2-Dichlorobenzene		YES	0	0	0	0	0	No	0	0	0	0	0	No
89	1,3-Dichlorobenzene		YES	0	0	0	0	0	No	0	0	0	0	0	No
90	1,4-Dichlorobenzene		YES	0	0	0	0	0	No	0	0	0	0	0	No
91	3,3-Dichlorobenzidine		YES	0	0	0	0	0	No	0	0	0	0	0	No
92	Diethyl Phthalate		YES	0	0	0	0	0	No	0	0	0	0	0	No
93	Dimethyl Phthalate		YES	0	0	0	0	0	No	0	0	0	0	0	No
94	2,4-Dinitrotoluene		YES	0	0	0	0	0	No	0	0	0	0	0	No
95	2,6-Dinitrotoluene		YES	0	0	0	0	0	No	0	0	0	0	0	No
96	1,2-Diphenylhydrazine		YES	0	0	0	0	0	No	0	0	0	0	0	No
97	Endosulfen (alpha)		YES	0	0.22	51290.070	10258.01394	No	0	0.056	34528.881	6905.778281	No		
98	Endosulfen (beta)		YES	0	0.22	51290.070	10258.01394	No	0	0.056	34528.881	6905.778281	No		
99	Endosulfen sulfate		YES	0	0	0	0	0	No	0	0	0	0	0	No
100	Endrin		YES	0	0.096	20048.755	4009.950904	No	0	0.036	22197.136	4439.427809	No		
101	Endrin Aldehyde		YES	0	0	0	0	0	No	0	0	0	0	0	No
102	Fluorene		YES	0	0	0	0	0	No	0	0	0	0	0	No
103	Fluorene		YES	0	0	0	0	0	No	0	0	0	0	0	No
104	Heptachlor Epoxide		YES	0	0.52	121231.074	24246.21477	No	0	0.004	2343.031	468.6052478	No		
105	Hexachlorobenzene	</													

Q _d *C _d + Q _{d2} *C _{d2} + Q _a *C _a = Q _r *C _r								Enter Max Daily Discharge as reported by Applicant (C _d) Max	Enter Avg Daily Discharge as reported by Applicant (C _d) Avg	Partition Coefficient (Stream / Lake)
ID	Pollutant	Carcinogen "yes"	Type	Background from upstream source (C _{d1}) Daily Max	Background from upstream source (C _{d1}) Monthly Avg	Background Instream (C _d) Daily Max	Background Instream (C _d) Monthly Avg			
1	Antimony		Metals	0	0	0	0	1.2	1.2	-
2	Arsenic*,**	YES	Metals	0	0	0	0	0.567	0.567	0.574
3	Beryllium		Metals	0	0	0	0	0	0	-
4	Cadmium**		Metals	0	0	0	0	0	0	0.236
5	Chromium / Chromium III**		Metals	0	0	0	0	3.89	3.89	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	-
7	Copper**		Metals	0	0	0	0	2.33	2.33	0.388
8	Lead**		Metals	0	0	0	0	0.52	0.52	0.206
9	Mercury**		Metals	0	0	0	0	0	0	0.302
10	Nickel**		Metals	0	0	0	0	2.1	2.1	0.505
11	Selenium		Metals	0	0	0	0	0	0	-
12	Silver		Metals	0	0	0	0	0	0	-
13	Thallium		Metals	0	0	0	0	0	0	-
14	Zinc**		Metals	0	0	0	0	9.27	9.27	0.330
15	Cyanide		Metals	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0	-
17	Hardness (As CaCO3)		Metals	0	0	0	0	0	0	-
18	Acrolein		VOC	0	0	0	0	0	0	-
19	Acrylonitrile*	YES	VOC	0	0	0	0	0	0	-
20	Aldrin	YES	VOC	0	0	0	0	0	0	-
21	Benzene*	YES	VOC	0	0	0	0	0	0	-
22	Bromoform*	YES	VOC	0	0	0	0	0	0	-
23	Carbon Tetrachloride*	YES	VOC	0	0	0	0	0	0	-
24	Chlordane	YES	VOC	0	0	0	0	0	0	-
25	Chlorobenzene		VOC	0	0	0	0	0	0	-
26	Chlorodibromo-Methane*	YES	VOC	0	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	-
29	Chloroform*	YES	VOC	0	0	0	0	0	0	-
30	4,4'-DDD	YES	VOC	0	0	0	0	0	0	-
31	4,4'-DDE	YES	VOC	0	0	0	0	0	0	-
32	4,4'-DDT	YES	VOC	0	0	0	0	0	0	-
33	Dichlorobromo-Methane*	YES	VOC	0	0	0	0	0	0	-
34	1,1-Dichloroethane		VOC	0	0	0	0	0	0	-
35	1,2-Dichloroethane*	YES	VOC	0	0	0	0	0	0	-
36	Trans-1,2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	-
37	1,1-Dichloroethylene*	YES	VOC	0	0	0	0	0	0	-
38	1,2-Dichloropropane		VOC	0	0	0	0	0	0	-
39	1,3-Dichloro-Propylene		VOC	0	0	0	0	0	0	-
40	Dieldrin	YES	VOC	0	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	0	0	-
44	Methylene Chloride*	YES	VOC	0	0	0	0	0	0	-
45	1,1,2,2-Tetrachloro-Ethane*	YES	VOC	0	0	0	0	0	0	-
46	Tetrachloro-Ethylene*	YES	VOC	0	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	0	-
48	Toxaphene	YES	VOC	0	0	0	0	0	0	-
49	Trifluorobenzene (TBT)	YES	VOC	0	0	0	0	0	0	-
50	1,1,1-Trichloroethane		VOC	0	0	0	0	0	0	-
51	1,1,2-Trichloroethane*	YES	VOC	0	0	0	0	0	0	-
52	Trichloroethylene*	YES	VOC	0	0	0	0	0	0	-
53	Vinyl Chloride*	YES	VOC	0	0	0	0	0	0	-
54	p-Chloro-m-Cresol		Acids	0	0	0	0	0	0	-
55	2-Chlorophenol		Acids	0	0	0	0	0	0	-
56	2,4-Dichlorophenol		Acids	0	0	0	0	0	0	-
57	2,4-Dimethylphenol		Acids	0	0	0	0	0	0	-
58	4,6-Dinitro-o-Cresol		Acids	0	0	0	0	0	0	-
59	2,4-Dinitrophenol		Acids	0	0	0	0	0	0	-
60	4,6-Dinitro-2-methylphenol	YES	Acids	0	0	0	0	0	0	-
61	Dioxin (2,3,7,8-TCDD)	YES	Acids	0	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	0	-
64	Pentachlorophenol*	YES	Acids	0	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	0	-
66	2,4,6-Trichlorophenol*	YES	Acids	0	0	0	0	0	0	-
67	Acenaphthene		Bases	0	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	0	-
70	Benidine		Bases	0	0	0	0	0	0	-
71	Benzo(A)Anthracene*	YES	Bases	0	0	0	0	0	0	-
72	Benzo(A)Pyrene*	YES	Bases	0	0	0	0	0	0	-
73	3,4-Benzo-Fluoranthene		Bases	0	0	0	0	0	0	-
74	Benzo(GH)Fluoranthene		Bases	0	0	0	0	0	0	-
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0	-
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	-
77	Bis (2-Chloroethoxy) Ether*	YES	Bases	0	0	0	0	0	0	-
78	Bis (2-Chloroisopropyl) Ether		Bases	0	0	0	0	0	0	-
79	Bis (2-Ethoxyhexyl) Phthalate*	YES	Bases	0	0	0	0	0	0	-
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0	-
82	2-Chloronaphthalene		Bases	0	0	0	0	0	0	-
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-
84	Chrysene*	YES	Bases	0	0	0	0	0	0	-
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	0	-
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	0	-
87	Dibenz(A,H)Anthracene*	YES	Bases	0	0	0	0	0	0	-
88	1,2-Dichlorobenzene		Bases	0	0	0	0	0	0	-
89	1,3-Dichlorobenzene		Bases	0	0	0	0	0	0	-
90	1,4-Dichlorobenzene		Bases	0	0	0	0	0	0	-
91	3,3-Dichlorobenzidine*	YES	Bases	0	0	0	0	0	0	-
92	Diethyl Phthalate		Bases	0	0	0	0	0	0	-
93	Dimethyl Phthalate		Bases	0	0	0	0	0	0	-
94	2,4-Dinitrotoluene*	YES	Bases	0	0	0	0	0	0	-
95	2,6-Dinitrotoluene		Bases	0	0	0	0	0	0	-
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	0	-
97	Endosulfan (alpha)	YES	Bases	0	0	0	0	0	0	-
98	Endosulfan (beta)	YES	Bases	0	0	0	0	0	0	-
99	Endosulfan sulfate	YES	Bases	0	0	0	0	0	0	-
100	Endrin	YES	Bases	0	0	0	0	0	0	-
101	Endrin Aldehyde	YES	Bases	0	0	0	0	0	0	-
102	Fluoranthene		Bases	0	0	0	0	0	0	-
103	Fluorene		Bases	0	0	0	0	0	0	-
104	Heptachlor	YES	Bases	0	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	-
106	Hexachlorobenzene*	YES	Bases	0	0	0	0	0	0	-
107	Hexachlorobutadiene*	YES	Bases	0	0	0	0	0	0	-
108	Hexachlorocyclohexane (alpha)	YES	Bases	0	0	0	0	0	0	-
109	Hexachlorocyclohexane (beta)	YES	Bases	0	0	0	0	0	0	-
110	Hexachlorocyclohexane (gamma)	YES	Bases	0	0	0	0	0	0	-
111	Hexachlorocyclopentadiene		Bases	0	0	0	0	0	0	-
112	Hexachloroethane		Bases	0	0	0	0	0	0	-
113	Indeno(1,2,3-CD)Pyrene*	YES	Bases	0	0	0	0	0	0	-
114	Isothiophene		Bases	0	0	0	0	0	0	-
115	Naphthalene		Bases	0	0	0	0	0	0	-
116	Nitrobenzene		Bases	0	0	0	0	0	0	-
117	N-Nitrosodi-N-Propylamine*	YES	Bases	0	0	0	0	0	0	-
118	N-Nitrosodi-N-Methylamine*	YES	Bases	0	0	0	0	0	0	-
119	N-Nitrosodi-N-Phenylamine*	YES	Bases	0	0	0	0	0	0	-
120	PCB-1016	YES	Bases	0	0	0	0	0	0	-
121	PCB-1221	YES	Bases	0	0	0	0	0	0	-
122	PCB-1232	YES	Bases	0	0	0	0	0	0	-
123	PCB-1242	YES	Bases	0	0	0	0	0	0	-
124	PCB-1248	YES	Bases	0	0	0	0	0	0	-
125	PCB-1254	YES	Bases	0	0	0	0	0	0	-
126	PCB-1260	YES	Bases	0	0	0	0	0	0	-
127	Phenanthrene		Bases	0	0	0	0	0	0	-
128	Pyrene		Bases	0	0	0	0	0	0	-
129	1,2,4-Trichlorobenzene		Bases	0	0	0	0	0	0	-

0.03	Enter Q _u = wastewater discharge flow from facility (MGD)
0.03094658	Q _u = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Q _{d2} = background stream flow in MGD above point of discharge
0	Q _{d2} = background stream flow from upstream source (cfs)
0	Enter 7Q10, Q _a = background stream flow in cfs above point of discharge
0	Enter or estimated, 7Q10, Q _a = background stream flow in cfs above point of discharge (7Q10 estimated at 75% of 7Q10)
0.4	Enter Mean Annual Flow, Q _a = background stream flow in cfs above point of discharge
0	Enter 7Q2, Q _a = background stream flow in cfs above point of discharge (For LVF class streams)
Enter for Lake	Enter C _u = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q _u + Q _{d2} + Q _a	Q _a = resultant in-stream flow, after discharge
Calculated on other	C _r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
100	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.80 s.u.	Enter, Background pH above point of discharge
YES	Enter, is discharge to a stream? "YES" Other option would be to a Lake. (This changes the partition coefficients for the metals)

** Use Partition Coefficients

June 26, 2026

Freshwater P&W classification		Background (from upstream source) (C _{max})		Max Daily Discharge as reported by Applicant (C _{max})		Freshwater Acute (ug/l) C _a = 1Q10				Avg Daily Discharge as reported by Applicant (C _{max})		Freshwater Chronic (ug/l) C _a = 7Q10				Human Health Consumption Fish only (ug/l)			
ID	Pollutant	RP?	C _{max}	C _{max}	C _{max}	Water Quality Criteria (C _a)	Draft Permit Limit (C _{max})	20% of Draft Permit Limit	RP?	C _{max}	C _{max}	Water Quality Criteria (C _a)	Draft Permit Limit (C _{max})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C _a)	Draft Permit Limit (C _{max})	20% of Draft Permit Limit	RP?
1	Antimony		0	1.2	0	0.587	592.334	118.467	No	0	0.587	0	261.324	52.265	No	0.33E-01	3.73E+02	7.47E+01	No
2	Arsenic	YES	0	0.587	0	0.587	592.334	118.467	No	0	0.587	0	261.324	52.265	No	0.33E-01	3.73E+02	7.47E+01	No
3	Beryllium		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
4	Cadmium		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
5	Chromium/ Chromium III		0	3.89	0	3.89	2713.189	542.632	No	0	3.89	0	352.926	70.585	No	0	0	0	No
6	Chromium/ Chromium VI		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
7	Copper		0	2.33	0	2.33	34.637	6.927	No	0	2.33	0	23.082	4.616	No	0	0	0	No
8	Lead		0	0.52	0	0.52	313.502	62.700	No	0	0.52	0	12.217	2.443	No	0	0	0	No
9	Mercury		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
10	Nickel		0	2.1	0	2.1	927.200	185.440	No	0	2.1	0	102.963	20.597	No	4.24E-02	4.24E-02	8.48E-03	No
11	Selenium		0	0	0	0	0	0	No	0	0	0	0	0	No	9.93E+02	9.93E+02	1.98E+02	No
12	Silver		0	0	0	0	0	0	No	0	0	0	0	0	No	2.40E+03	2.40E+03	4.80E+02	No
13	Thallium		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
14	Zinc		0	9.27	0	9.27	355.062	71.018	No	0	9.27	0	357.997	71.599	No	1.40E+04	1.40E+04	2.80E+03	No
15	Cyanide		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
16	Total Phenolic Compounds		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
17	Hardness (As CaCO3)		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
18	Acetone		0	0	0	0	0	0	No	0	0	0	0	0	No	5.43E+00	5.43E+00	1.09E+00	No
19	Acrylonitrile		0	0	0	0	0	0	No	0	0	0	0	0	No	2.01E+00	2.01E+00	4.01E-01	No
20	Aldrin	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	4.09E+04	4.09E+04	8.19E+05	No
21	Benzene	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	2.15E+02	2.15E+02	4.31E+01	No
22	Bromoform	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.10E+03	1.10E+03	2.19E+02	No
23	Carbon Tetrachloride	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.33E+01	1.33E+01	2.67E+00	No
24	Chlordane	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	6.58E-03	6.58E-03	1.32E-03	No
25	Chlorobenzene		0	0	0	0	0	0	No	0	0	0	0	0	No	0.08E+02	0.08E+02	1.61E+02	No
26	Chlorodibromo-Methane	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.03E+02	1.03E+02	2.06E+01	No
27	Chloroethane		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
28	2-Chloro-Ethylvinyl Ether		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
29	Chloroform	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.42E+03	1.42E+03	2.84E+02	No
30	4,4'- DDD	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	2.53E-03	2.53E-03	5.05E-04	No
31	4,4'- DDE	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.78E-03	1.78E-03	3.57E-04	No
32	4,4'- DDT	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.78E-03	1.78E-03	3.57E-04	No
33	Dichlorobromo-Methane	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.40E+02	1.40E+02	2.80E+01	No
34	1,1-Dichloroethane		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
35	1,2-Dichloroethane	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	2.98E+02	2.98E+02	5.95E+01	No
36	Trans-1,2-Dichloro-Ethylene		0	0	0	0	0	0	No	0	0	0	0	0	No	5.91E+03	5.91E+03	1.18E+03	No
37	1,1-Dichloroethylene	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	5.80E+04	5.80E+04	1.16E+04	No
38	1,2-Dichloropropane		0	0	0	0	0	0	No	0	0	0	0	0	No	8.49E+00	8.49E+00	1.70E+00	No
39	1,3-Dichloro-Propylene		0	0	0	0	0	0	No	0	0	0	0	0	No	1.23E+01	1.23E+01	2.46E+00	No
40	Dieldrin	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	4.35E-04	4.35E-04	8.70E-05	No
41	Ethylbenzene		0	0	0	0	0	0	No	0	0	0	0	0	No	1.24E+03	1.24E+03	2.49E+02	No
42	Methyl Bromide		0	0	0	0	0	0	No	0	0	0	0	0	No	8.71E+02	8.71E+02	1.74E+02	No
43	Methyl Chloride		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
44	Methylene Chloride	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	4.81E+03	4.81E+03	9.63E+02	No
45	1,1,2,2-Tetrachloro-Ethane	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	3.25E+01	3.25E+01	6.50E+00	No
46	Tetrachloro-Ethylene	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	2.87E+01	2.87E+01	5.74E+00	No
47	Toluene		0	0	0	0	0	0	No	0	0	0	0	0	No	8.72E+03	8.72E+03	1.74E+03	No
48	Toxaphene	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	2.28E-03	2.28E-03	4.51E-04	No
49	Tributyltin (TBT)	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
50	1,1,1-Trichloroethane		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
51	1,1,2-Trichloroethane	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.27E+02	1.27E+02	2.53E+01	No
52	Trichloroethylene	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	2.43E+02	2.43E+02	4.87E+01	No
53	Vinyl Chloride	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.68E+01	1.68E+01	3.37E+00	No
54	p-Chloro-m-Cresol		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
55	2-Chlorophenol		0	0	0	0	0	0	No	0	0	0	0	0	No	8.71E+01	8.71E+01	1.74E+01	No
56	2,4-Dichlorophenol		0	0	0	0	0	0	No	0	0	0	0	0	No	1.72E+02	1.72E+02	3.44E+01	No
57	2,4-Dimethylphenol		0	0	0	0	0	0	No	0	0	0	0	0	No	4.98E+02	4.98E+02	9.95E+01	No
58	4,6-Dinitro-o-Cresol		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
59	2,4-Dinitrophenol		0	0	0	0	0	0	No	0	0	0	0	0	No	3.11E+03	3.11E+03	6.22E+02	No
60	4,6-Dinitro-2-methylphenol	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	2.30E+03	2.30E+03	4.61E+02	No
61	Dioxin (2,3,7,8-TCDD)	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	3.71E-07	3.71E-07	7.43E-08	No
62	2-Nitrophenol		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
63	4-Nitrophenol		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
64	Pentachlorophenol	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	2.48E+01	2.48E+01	4.92E+00	No
65	Phenol		0	0	0	0	0	0	No	0	0	0	0	0	No	5.00E+05	5.00E+05	1.00E+05	No
66	2,4,6-Trichlorophenol	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.97E+01	1.97E+01	3.94E+00	No
67	Acenaphthene		0	0	0	0	0	0	No	0	0	0	0	0	No	5.79E+02	5.79E+02	1.16E+02	No
68	Acenaphthylene		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
69	Anthracene		0	0	0	0	0	0	No	0	0	0	0	0	No	2.33E+04	2.33E+04	4.67E+03	No
70	Benidine		0	0	0	0	0	0	No	0	0	0	0	0	No	1.18E-04	1.18E-04	2.32E-05	No
71	Benzo(a)Anthracene	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.48E-01	1.48E-01	2.97E-02	No
72	Benzo(a)Pyrene	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.48E-01	1.48E-01	2.97E-02	No
73	Benzo(b)fluoranthene		0	0	0	0	0	0	No	0	0	0	0	0	No	1.07E-02	1.07E-02	2.13E-03	No
74	Benzo(g,h,i)Perylene		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
75	Benzo(k)Fluoranthene		0	0	0	0	0	0	No	0	0	0	0	0	No	1.07E-02	1.07E-02	2.13E-03	No
76	Bis (2-Chloroethoxy) Methane		0	0	0	0	0	0	No	0	0	0	0	0	No	4.28E+00	4.28E+00	8.55E-01	No
77	Bis (2-Chloroethoxy) Ether	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	3.78E+04	3.78E+04	7.56E+03	No
78	Bis (2-Chloroethoxy) Ether	YES	0	0	0	0	0	0	No	0	0	0	0	0	No	1.79E+01	1.79E+01	3.57E+00	No
79	Bis (2-Ethoxy) Phthalate		0	0	0	0	0	0	No	0	0	0	0	0	No	0	0	0	No
80	4-Bromophenyl Phenyl Ether		0	0	0	0	0	0	No	0	0	0	0	0	No	1.13E+03	1.13E+03	2.25E+02	No
81	Butyl Benzyl Phthalate		0	0	0	0	0	0	No	0	0	0	0	0	No	9.24E+02	9.24E+02	1.85E+02	

Close Form

Waste Load Allocation Summary

Open FILE by
permit number

Comments included

☒ Yes ☐ No

General Information

Request
Number 3638

Page 1

Information
Verified By JJM

Year File Was Created 1984

Receiving Stream Name Tennessee River (Guntersville Lake)

Previous File Name

OR: Local Name (If applicable)

Facility Name WestRock CP - Stevenson

ID Number 1716

Previous Discharger Name Smurfit Stone Container Corp

Or-AKA (includes previous file name)

12 Digit HUC Code 060300010205

River Basin Tennessee

County Jackson

Use Classification PWS/S/F&W

Date of WLA Response 10/10/2019

Discharge Latitude 34.855000

Lat/Long Method Municipal/Industrial

Discharge Longitude -85.787050

Site Visit Completed? ☒ Yes ☐ No

Approved TMDL?

☐ Yes ☒ No

Date of Site Visit 9/3/2019

Approval Date of TMDL

Waterbody Impaired? ☒ Yes ☐ No

Antidegradation ☐ Yes ☒ No

Permit Information

Waterbody Tier Level Tier I

Permit Number AL0022314

Use Support Category 5

Permit Status Active

Other Point Sources? ☒ Yes ☐ No

Type of Discharger

Sources Included in Model

Hollywood WWTP
Scottsboro Southside WWTP
Section WWTP
Scottsboro Goose Pond WWTP

- ☒ Municipal
- ☒ Industrial
- ☒ Semipublic/Private
- ☒ Mining

Waste Load Allocation Information

Modeled Reach Length	28.5	Miles	Date of Allocation	10/2/2019
Name of Model Used	QUAL2K		Allocation Type	Annual
Model Completed by	James Mooney		Type of Model Used	Data-based
Allocation Developed by	Water Quality Branch			

Waste Load Allocation Summary

Annual Effluent Limits	Conventional Parameters				Other Parameters			
	Qw	MGD	Qw	MGD	Qw	MGD	Qw	MGD
Season			Season		Season		Season	
From			From		From		From	
Through			Through		Through		Through	
CBOD5 214.5 mg/l			CBOD5		CBOD5		TP	
NH3-N			NH3-N		NH3-N		TN	
TKN			TKN		TKN		TSS	
D.O. 0 mg/l			D.O.		D.O.			

Annual/Summer NH3-N toxicity based?:

Winter NH3-N toxicity based?:

"Monitor Only" Parameters for Effluent:		Parameter	Frequency	Parameter	Frequency
		TP	Monthly	DO	Monthly
		TKN	Monthly	NH3-N	Weekly
		NO2+NO3-N	Monthly		

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer	Winter
CBODu	2 mg/l	
NH3-N	0.11 mg/l	
Temperature	28 °C	
pH	7 su	

Hydrology at Discharge Location

Drainage Area Qualifier	Drainage Area	22826	sq mi	Method Used to Calculate
Estimated	Stream 7Q10	5719	cfs	ADEM Estimate w/TVA Data
	Stream 1Q10	4289	cfs	ADEM Estimate w/TVA Data
	Stream 7Q2	9442	cfs	ADEM Estimate w/TVA Data
	Annual Average	35993	cfs	ADEM Estimate w/TVA Data

Comments and/or Notations CBOD5 concentration limit of 215.4 mg/l was calculated based on maintaining the categorical based effluent load of 14,461 lbs/day, given the increased effluent flowrate of 8.05 MGD (and F-ratio of 7.5). The Qual2k model predicts that further assimilative capacity is available in the Tennessee River; however, CBOD5 effluent limits inputs for Westrock CP- Steveson are reflective of their currently permitted categorical guideline values.

Close Form

Mixing Zone Analysis Summary

Open FILE by
permit number

Comments included

☒ Yes ☐ No

General Information

Request
Number 3638

Page 1

Year File Was Started 1984

Information
Verified By JJM

Date of MZ Response 10/11/2019

Name of Receiving Stream Tennessee River (Guntersville Lake)

Previous stream name:

Or-AKA (If applicable)

Facility Name WestRock CP Stevenson

Previous Name of Discharger Smurfit Stone Container Corp

Or-AKA (If applicable)

Other Point Sources? ☒ Yes ☐ No

12 Digit HUC Code 060300010205

River Basin Tennessee

County Jackson

Use Classification PWS / F&W

Discharge Latitude 34.855000

Discharge Longitude -85.787050

Site Visit Completed? ☒ Yes ☐ No

Date of Site Visit 9/3/2019

Sources Included in the Model:

Hollywood WWTP
Scottsboro Southside WWTP
Section WWTP
Scottsboro Goose Pond WWTP

Permit Information

Type of Discharge

- ☒ Municipal
☒ Industrial
☒ Semipublic/Private

Permit Number AL0022314

Permit Status Active

Hydrology

Drainage Area 22826 sq mi

Stream 7Q10 5719 cfs

Stream 1Q10 4289 cfs

Stream 7Q2 9442 cfs

Annual Average 35993 cfs

Date of MZ Analysis 10/1/2019

Discharge Design Flow 8.05 MGD

Method Used to Calculate

ADEM Estimate w/TVA Data

ADEM Estimate w/TVA Data

ADEM Estimate w/TVA Data

ADEM Estimate w/TVA Data

Model Completed by James Mooney

Seasonal? ☐ Yes ☒ No

If not seasonal, only the
summer sections will be used

Pollutant Category

Whole Effluent Toxicity (WET) ☒ Thermal ☐ Pathogens ☐

Mixing Zone Analysis Summary - Page 2

WET Parameters

Summer

Acute

Ambient Streamflow 4289 cfs
 ZID Length 4.28 Meters
 ZID IWC 15.2 %

Chronic

Ambient Streamflow cfs
 Mixing Zone Length Meters
 Mixing Zone IWC %

Winter

Acute

Ambient Streamflow cfs
 ZID Length 4.28 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 ZID distance of 4.28 meters is based on ZID criteria $50 \times \text{DLS}$. Individual plumes have not merged by the edge of the ZID (4.28 meters); therefore CORMIX 1 is the applicable model to evaluate mixing characteristics.

Smurfit Westrock
Stevenson, AL Mill
1611 County Road 85
Stevenson, AL 35772
(256) 437-3305
angela.aten@smurfitwestrock.com
smurfitwestrock.com



June 2, 2026

Ms. Victoria Kim
ADEM – Water Division
1400 Coliseum Blvd.
Montgomery, AL 36110-2059

RECEIVED

JUN 04 2026

VIA OVERNIGHT MAIL: 8188 2795 9248

IND/MUN BRANCH
WATER DIVISION

Re: NPDES Permit – AL0022314
Draft Permit Comments
WestRock CP, LLC – Stevenson, AL Mill

Ms. Kim,

In response to the draft renewal permit (AL0022314) dated May 7, 2026, the WestRock CP, LLC – Stevenson, AL Mill is submitting the following comments:

1. Page 3 of 33: Sample Type shows "Grab", however, page 28 of 33 shows (3) 24-hour composite samples. Request "(3) 24-hour composite samples remain as grab samples" on page 28.
2. Page 4 of 33: Request Quantity or Loading for Pentachlorophenol remain at daily maximum of 2.58 lbs/day while still allowing the *9 certification.
3. Page 4 of 33: Request Quantity or Loading for Trichlorophenol remain at daily maximum of 0.98 lbs/day while still allowing the *9 certification.
4. Page 6 of 33: Request DSN005Q be changed to semi-annually with the arsenic and cyanide testing on page 7 of 33. This outfall was changed to quarterly from semi-annual in the 2019 permit renewal to include the cyanide and arsenic testing.
5. Page 8 of 33: Request to remove DSN025 from page 9 of 33 and add it to page 8 of 33. Insert "and DSN025" after "DSN 0006" in footnote 6 at the bottom of the page. DSN024 is not representative of DSN025.
6. Page 9 of 33: Remove DSN025 from this page of the permit and add a note stating that "Monthly sampling is required from DSN024 only when the wet deck pond overflows".
7. Page 28 of 33: Request toxicity confidence level remain at 90% rather than change to 95%.
8. Page 31 of 33 – Replace "WestRock Mill Company, LLC" with "WestRock CP, LLC".

Smurfit Westrock
Stevenson, AL Mill
1611 County Road 85
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If you have any questions, you can reach me via email at angela.aten@smurfitwestrock.com or by phone at (256) 437-3305.

Sincerely,

A handwritten signature in blue ink that reads 'Angela Aten'.

Angela Aten
Sr. Environmental Manager
WestRock CP, LLC

Cc: File: II.101
Roberto Artiga

RECEIVED

JUN 04 2026

IND/MUN BRANCH
WATER DIVISION

NPDES PERMIT RENEWAL APPLICATION

Prepared for:

**WESTROCK CP, LLC – STEVENSON MILL
1611 COUNTY ROAD 85
STEVENSON, ALABAMA 35772**

July 2025

Prepared by:

**Angela Aten
WestRock CP, LLC
P. O. Box 508
Stevenson, AL 35772
(256) 437-3305**

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Section 1. Introduction

WestRock CP, LLC owns and operates an unbleached semi-chemical pulp and paperboard mill in Stevenson, Alabama. The facility discharges treated process wastewater, cooling water, landfill leachate, and storm water runoff to the Tennessee River through Outfall DSN 001 under National Pollutant Discharge Elimination System (NPDES) Permit AL0022314 issued by the Alabama Department of Environmental Management (ADEM). The facility also discharges treated sanitary wastewater from Outfall DSN 002 to the Tennessee River, and landfill leachate and storm water runoff associated with industrial activity through outfall DSN 005. The facility discharges storm water associated with industrial activity through outfalls DSN 006, DSN 0022, and DSN 023 to unnamed tributaries to the Tennessee River and through outfalls DSN 024 and DSN 025 to unnamed tributaries to Bengis Creek.

The Stevenson Mill operates two paper machines. The No. 1 and No. 2 Paper Machines produce corrugating medium from semi-chemical and secondary fiber. The facility is subject to the point source category effluent limitation guidelines for Semi-Chemical Pulp and Paper – Sodium Base Mills (as promulgated in 40 CFR Part 430 Subpart F) and Secondary Fiber Non-Deink – Corrugating Medium (as promulgated in 40 CFR Part 430 Subpart J).

This document provides supporting information for the following state and federal application forms for renewal of the NPDES permit:

- EPA Form 1 – General Information
- EPA Form 2C – Application for Permit to Discharge Wastewater – Existing Manufacturing, Commercial, Mining and Silvicultural Operations (DSN 001, DSN 002, and DSN 005)
- EPA Form 2F – Application for Permit to Discharge Storm Water (DSN 006, DSN 022, DSN 023, DSN 024, and DSN 025)
- ADEM Form 187 – NPDES Permit Application Supplementary Information

Section 2. Proposed Permit

2.1 Production Rates

Categorical limits for the Stevenson Mill have been developed using the average daily production rates for corrugating medium recorded for the period of January 2024 through December 2024. This period represents the highest annual average daily production rate in the most recent five-year period. Table 1 summarizes the daily average production rates for the January 2024-December 2024 operating period.

Table 1 – Paper Machine Production WestRock CP, LLC – Stevenson, Alabama	
Machine Furnish	2024 Daily Production (Air-Dry Tons/Day)
Semi-Chemical Pulp	1,540.89
Recycle Pulp	1,196.99
Total Machine Production	2,737.88

2.2 Development of Effluent Limits for DSN 001

WestRock CP, LLC's Stevenson Mill is subject to the Effluent Limitation Guidelines and Standards for the Pulp, Paper and Paperboard Point Source Category prescribed in 40 CFR Part 430 by the U. S. Environmental Protection Agency (EPA). Discharges associated with the Effluent Limitation Guidelines are conveyed to the mill's wastewater treatment system and discharged through Outfall DSN 001. The following subcategories of these guidelines apply to the Stevenson Mill:

Subpart F – Semi-Chemical Subcategory (40 CFR 430.60) – Sodium Base Mills

- Semi-Chemical Pulp Production (Furnish to Both Paper Machines)

Subpart J – Secondary Fiber Non-Deink Subcategory (40 CFR 430.100)

- Corrugating Medium Finish (Furnish to Both Paper Machines)

The production rates associated with the highest annual average daily production rate in the most recent five-year period were used in the calculation of effluent limits based on the above referenced subparts. Table 2 summarizes the calculated effluent limits.

Table 2
Calculated Permit Limits from Effluent Limitation Guidelines
WestRock CP, LLC – Stevenson, Alabama

Category	Description	Limit Basis	Categorical Limits (lbs per 1,000 lbs)				Average Production (Tons per Day)	Allowable Limits (ppd)			
			Daily Maximum		Monthly Average			Daily Maximum		Monthly Average	
			BOD5	TSS	BOD5	TSS		BOD5	TSS	BOD5	TSS
Subpart F	Semi-Chemical (Sodium Base)	BPT	8.7	11	4.35	5.5	1,540.89	26,811	33,900	13,406	16,950
Subpart J	Secondary Fiber Non-Deink (Corrugated)	BPT	5.7	9.2	2.8	4.6	1,197.00	13,646	22,025	6,703	11,012
Categorical Totals							2,737.88	40,457	55,925	20,109	27,962
Current Permit Limits – DSN 001								28,902	40,410	14,461	20,205
Legend: BPT = Best practicable control technology currently available ppd = pounds per day											

2.2.1 Effluent BOD₅ and TSS

Treated wastewater consisting of process wastewater, landfill leachate, and storm water runoff are discharged to the Tennessee River through Outfall DSN 001. The production-based allocations for BOD₅ and TSS for process wastewater are summarized in Table 2. Because the production-based allocations for both BOD₅ and TSS in Table 2 exceed the maximum daily and monthly average discharge limits from the current NPDES permit, WestRock is proposing to retain the current NPDES permit limits for BOD₅ and TSS for DSN 001.

2.2.2 Effluent pH

Effluent pH limits of 6.0 (minimum daily) to 9.0 (maximum daily) are proposed to be continued. These limits are consistent with the existing limits and will be protective of water quality.

2.2.3 Effluent Pentachlorophenol and Trichlorophenol

Permit limits for pentachlorophenol and trichlorophenol are required by 40 CFR Part 430 Subparts F and J unless the permittee agrees to submit a certification of not using these compounds as biocides. Consistent with the requirements of the current permit, WestRock proposes to provide either annual analyses of these pollutants or an annual certification to ADEM that biocides containing pentachlorophenol and/or trichlorophenol were not used by the facility by January 28 following each calendar year of facility operation.

2.2.4 Effluent Biomonitoring

The current permit requires annual 48-hour acute biomonitoring at an in-stream waste concentration (IWC) of 16 percent based upon CORMIX modeling performed by ADEM in 2019. No changes are proposed to the effluent biomonitoring requirements in the current NPDES permit.

2.2.5 Receiving Stream Monitoring

The Stevenson Mill is currently required to conduct instream monitoring for dissolved oxygen (DO), water temperature, and pH, at a depth of five (5) feet below the river surface at several locations along the Tennessee River. Monitoring is required at a frequency of once every two weeks between June 1 and September 30, unless the instream DO is greater than 6.0 mg/L at Tennessee River Mile 405.7.

The Stevenson Mill proposes to reduce the monitoring period for in-stream monitoring. Our proposed start date to begin in-stream monitoring is July 1 and the proposed completion date is September 30. A review of the in-stream monitoring data collected by the Stevenson Mill during the past six years indicates that during the month of June, the DO was 6.35 mg/L or greater at 24 river stations measured, with an average DO concentration of 7.22 mg/L. Based upon this review of historical DO data, the Stevenson Mill requests to eliminate in-stream monitoring during the calendar month of June.

2.3 Treated Sanitary Wastewater (DSN 002)

WestRock treats sanitary wastewater and discharges the treated effluent to the Tennessee River through DSN 002. No changes are proposed to the DSN 002 monitoring requirements in the current NPDES permit.

2.4 Landfill Leachate and Storm Water (DSN 005)

WestRock collects leachate and storm water runoff from the Industrial Landfill in the Upper and Lower Leachate Ponds for physical treatment. Discharges from the Upper Leachate Pond can be pumped to the mill's Sludge Pond before discharge through DSN 001. Landfill leachate and storm water from both leachate ponds can discharge to storm water outfall DSN 005.

In the current permit, WestRock is required to perform quarterly monitoring of DSN 005, with permit limits for Oil & Grease and Total Dissolved Arsenic. Quarterly monitoring and reporting is also required for discharge flow, pH, Free Available Cyanide, BOD₅ and TSS. Based upon the monitoring results submitted during the current permit, WestRock is proposing the removal of requirements for monitoring Total Dissolved Arsenic and Free Available Cyanide.

2.5 Storm Water Outfalls (DSN 006 and DSN 022 – DSN 025)

WestRock currently discharges storm water associated with industrial activity through existing outfalls DSN 006, DSN 022, DSN 023, DSN 024, and DSN 025. Outfall DSN 023 consists of approximately 145 acres and discharges most of the stormwater runoff that is not otherwise collected and treated for discharge from Outfall DSN 001. DSN 023 includes discharges associated with rail car exterior washing operations that do not use solvents.

The DSN 022 drainage area conveys storm water runoff from non-anthropogenic sheet flow stormwater runoff associated with rain events passing through a constructed wetlands that was installed in the late 1990's as part of the mill's expansion. While there is a sanitary wastewater treatment plant and an equipment laydown yard just north and slightly east of the constructed wetlands, the topography is elevated on the western and southern borders of these areas to prevent stormwater runoff from industrial activity into the constructed wetlands. From the constructed wetlands, storm water flows through a rip rap dam into an unnamed tributary to the Tennessee River. WestRock is requesting the flexibility to sample directly from the discharge from the constructed wetlands as an alternate monitoring point to the discharge of the DSN 022 outfall during periods when the DSN 022 outfall is inaccessible because of wet or winter weather conditions.

Outfall DSN 024 contains settled storm water from the Wet Yard settling pond, and Outfall DSN 025 consists of storm water runoff from the area west of the Wet Yard. No monitoring is required by the current permit for outfalls DSN 006 and DSN 025 because the water quality of the discharges from outfalls DSN 006 and DSN 025 resembles the water quality in the discharges from DSN 023 and DSN 024, respectively. The Stevenson Mill is requesting that the monitoring form in AEPACS for DSN 025 be disabled because the permit does not

require semi-annual monitoring. The facility has performed semi-annual monitoring of DSN 025 for the current permit.

The existing NPDES permit requires the development of a Best Management Practices (BMP) plan for controlling the contamination of storm water runoff from areas associated with industrial activity. This BMP plan has been developed and implemented by the facility. Results from the monitoring activities are used to evaluate the effectiveness of the BMP plan. The continued implementation of the plan in conjunction with the monitoring required by the current permit are adequate to ensure protection of water quality in the receiving waters.

Section 3. NPDES Permit Renewal Application

Permit application forms used for this renewal application have been loaded directly into AEPACS. The U. S. Environmental Protection Agency (EPA) and ADEM forms associated with this permit renewal include the following:

- U. S. EPA Form 1
- U. S. EPA Form 2C (for Outfalls DSN 001, DSN 002, and DSN 005)
- U. S. EPA Form 2F (for existing Storm Water Outfalls DSN 006, DSN 022, DSN 023, DSN 024 and DSN 025)
- ADEM Form 187

A site map showing the NPDES outfall locations is provided in Figure 1. This map is provided as a supplement to Section 7 of the EPA Form 1.

3.2 Form 2C Sampling

WestRock collected the required composite and grab samples to complete the U. S. EPA Form 2C for renewal of the facility's NPDES permit. The contract laboratory reported detectable results for the following pollutants for which sampling was required for DSN 001. Explanations for these detectable results are provided below:

- Antimony, Arsenic, Chromium, Copper, Lead, Nickel, and Zinc (Metals, Cyanide, and Total Phenols) – Antimony, Arsenic, Chromium, Copper, Lead, Nickel, and Zinc are naturally occurring substances in wood. The facility processes thousands of tons of wood per day to produce semi-chemical pulp. While most of the residual metals are treated in the facility's effluent treatment system and removed with the primary clarifier sludge, Antimony, Arsenic, Chromium, Copper, Lead, Nickel, and Zinc were measured above the minimum detection levels in the facility's Form 2C effluent sampling.
- There were no other positive results detected for the pollutants listed in Table B of the Form 2C for Outfall DSN 001.

3.3 Receiving Waters

Outfalls DSN 001 and DSN 002 discharge to a section of the Tennessee River (AL06030001-0205-102) that was on ADEM's Draft §303(d) List for atmospheric deposition of mercury. This section of the Tennessee River was removed from the Draft §303(d) List by ADEM in 2022. The Stevenson Mill does not burn coal as a fuel in any of the facility's boilers. Furthermore, mercury was below detection limits in the Form 2C sampling for both DSN 001 and DSN 002.

NPDES Individual Permit Mod/Reissue (Form 187) - Supplementary Information for Industrial Facilities

version 2.11

(Submission #: HQA-VCRM-GZNM6, version 1)

Digitally signed by:
AEPACS
Date: 2025.07.17 11:13:23 -05:00
Reason: Submission Data
Location: State of Alabama

Details

Submission ID HQA-VCRM-GZNM6

Form Input

General Instructions

This form should be used to submit the following permit requests for permitted Industrial Individual NPDES facilities

- Permit Transfers
- Permittee/Facility Name Changes
- Minor Modifications, for example:
 - > Frequency of monitoring or reporting modifications
 - > Changes to interim compliance dates in a schedule of compliance, not including the final compliance date.
 - > Removal of a point source outfall, provided the discharge is terminated and does not result in discharge of pollutants from other outfalls, except in accordance with permit limits.
- Major Modifications, (Any modifications not covered by minor mod's, whether Effluent Limit changes occur or not)
- Reissuances
 - Reissuance of a permit due to approaching expiration
 - Revocation and Reissuance of permit prior to its scheduled expiration

Applicable Base Fees:

- Permit Transfers and/or Permittee/Facility Name Changes
 - > \$800
- Minor Modifications (see examples above)
 - > \$3,940 (Major Sources)
 - > \$3,120 (Minor Sources)
- Major Modifications
 - > \$17,990 (Major Sources)
 - > \$5,615 (Minor Sources)
- Reissuances
 - > \$17,990 (Major Sources)
 - > \$5,615 (Minor Sources)

For assistance, please click [here](#) to determine the permit staff responsible for the site or call (334) 271-7799

Processing Information

Purpose of Application

Reissuance of Permit Due to Approaching Expiration

Please indicate if the Permittee is applying for a permit transfer and/or name change in addition to permit modification or reissuance:

None

Action Type

Reissuance

If applicable, briefly describe any planned changes at the facility that are included in this reissuance application:

NONE PROVIDED

General Information

SID Permit Number (if your facility currently holds an SID permit, please provide that number below):

NONE PROVIDED

NPDES or General Permit Numbers (if applicable, please list all permit numbers):

AL0022314

Is this facility/site only applying for permit coverage for discharges from stormwater?

No

Is a new stormwater outfall being added?

No

Permit Information

Permit Number

AL0022314

Current Permittee Name

WestRock CP, LLC

Permittee

Permittee Name

WestRock CP, LLC

Mailing Address

Post Office Box 508

Stevenson, AL 35772

Per ADEM Admin. Code r. 335-6-6-.09 (1), a Responsible Official is defined as CEO, President, any position at a level of Vice President or higher, Owner, Partner, Managing Member (LLC), or ranking elected official. Please provide the contact information for the person meeting this definition.

Do NOT enter information for a person that is/will be a Duly Authorized Representative (DAR) (i.e. a person that has been delegated signatory permissions by a Responsible Official). A person that is a Duly Authorized Representative is NOT considered a RESPONSIBLE OFFICIAL.

Responsible Official

Prefix

Mr.

First Name Last Name

Thomas Stigers

Title

President USA & Canada Paper/Mills

Organization Name

Westrock CP, LLC

Phone Type Number Extension

Business 7704482193

Email

tom.stigers@smurfitwestrock.com

Mailing Address

1000 ABERNATHY RD

ATLANTA, GA 30328-5602

Does the Responsible Official intend to delegate signatory authority for DMRs or other compliance reports to an individual as a duly authorized representative (DAR) for this site?

Yes

Pursuant to ADEM Admin. Code r. 335-6-6-.09(2), a person may ONLY be delegated signatory authority for reports if that person has responsibility for the overall operation of the regulated facility or regulated activity. Once such delegation is made, that person is considered a duly authorized representative (DAR).

Existing Permit Contacts

Affiliation Type	Contact Information	Remove?
Environmental Contact, Facility Contact, DMR Contact	Angela Aten	Keep
Notification Recipient, Responsible Official	Darrell Daubert	Remove
Permittee	WestRock CP, LLC	Keep

Duly Authorized Representative (DAR)

Duly Authorized Representative - Delegation of Signatory Authority by Responsible Official

If the permittee has not already prepared a signed and dated delegation form/letter, an optional form can be downloaded from the link below. All information should be completed along with the responsible official's signature and date signed. That signed form can be uploaded in the attachment section below titled "DAR Documentation".

[Optional Delegation of Signatory Authority Form](#)

Delegation Document for Duly Authorized Representation (DAR)

[Environmental Delegation of Authority - Mill Operations - 05222025.pdf - 06/09/2025 02:57 PM](#)

Comment

NONE PROVIDED

Pursuant to ADEM Admin. Code r. 335-6-6-.09(2), a person may ONLY be delegated signatory authority for reports if that person has responsibility for the overall operation of the regulated facility or activity. Once such delegation is made, that person is considered a duly authorized representative (DAR).

Authorized Rep

Prefix

Mr.

First Name Last Name

Stephan Atkins

Title

Interim General Manager

Organization Name

WestRock CP, LLC

Phone Type Number Extension

Business 2564372161

Email

steve.atkins@smurfitwestrock.com

Mailing Address

1611 County Road 85

P.O. Box 508

Stevenson, AL 35772

United States

Facility/Site Information

Facility/Site Name

WestRock CP, LLC-Stevenson Mill

Organization/Ownership Type

LLC

Facility/Site Address or Location Description

1611 County Road 85

P.O. Box 508

Stevenson, AL 35772

Facility/Site County

Jackson

Detailed Directions to the Facility/Site

Turn right from US Highway 72 onto County Rd. 85 towards Tennessee River. County road 85 proceeds south and ends at main gate.

Facility Map

[Form 1 Topographic Map.pdf - 07/08/2025 10:25 AM](#)

Comment

NONE PROVIDED

Please refer to the link below for Lat/Long map instruction help:

[Map Instruction Help](#)

Facility/Site Front Gate Latitude and Longitude

34.86857242777964,-85.78698376190185

1611 County Road 85, Stevenson, AL

SIC Code(s) [Please enter Primary SIC Code first followed by any additional applicable SIC Codes]

2631-Paperboard Mills

NAICS Code(s) [Please enter Primary NAICS Code first followed by any additional applicable NAICS Codes]

322130-Paperboard Mills

Facility/Site Contact

Prefix

Ms.

First Name Last Name

Angela Aten

Title

Sr. Environmental Manager

Organization Name

WestRock CP, LLC

Phone Type Number Extension

Business 2564373305

Email

angela.aten@smurfitwestrock.com

Address

1611 County Road 85

P.O. Box 508

Stevenson, AL 35772

DMR Contact(s) (1 of 2)

DMR Contact**Prefix**

Ms.

First Name Last Name

Angela Aten

Title

Sr. Environmental Manager

Phone Type Number Extension

Business 2564373305

Email

angela.aten@smurfitwestrock.com

Address

1611 County Road 85

P.O. Box 508

Stevenson, AL 35772

DMR Contact(s) (2 of 2)**DMR Contact****Prefix**

Ms.

First Name Last Name

River Samad

Title

Supv, Environmental Engineer

Phone Type Number Extension

Mobile 2565480690

Email

river.samad@smurfitwestrock.com

Address

1611

Stevenson, AL 35772

Applicant Business Entity Information**Address of Incorporation**

504 Thrasher Street

Agent Designated by the Corporation for Purposes of Service

Name	Address
Corporation Service Company, Inc.	641 South Lawrence Street, Montgomery, AL 36104

Please provide all corporate officers

Name	Title	Address
Stephanie W. Bignon	Secretary	1000 Abernathy Road NE, Atlanta, GA 30328

Does the applicant applying for coverage have a Parent Corporation?

Yes

Parent Corporation of Applicant

Name	Address
WestRock CP, LLC	1000 Abernathy Road NE, Atlanta, GA 30328

Does the applicant applying for coverage have Subsidiary Corporations?

No

Enforcement History

Has the applicant been issued any Notices of Violation, Orders (Consent or Administrative/Unilateral), or Judicial Actions (Complaint, Settlement Agreement, Consent Decree, or Court Order) concerning water pollution or other permit violations within the State of Alabama in the past five years?

No

Business Activity

A facility with processes inclusive in the business areas shown below may be covered by Environmental Protection Agency's (EPA) categorical effluent guideline standards. These facilities are termed **categorical users**. If unsure, please call the Industrial Section at (334) 271-7943 to discuss or use the link below to contact the Permit Engineer for the county the facility is/will be located in.

[Industrial Section Assignment Map](#)

If your facility conducts or will be conducting any of the processes listed below (regardless of whether they generate wastewater, waste sludge, or hazardous wastes), please check the category of business activity:

Pulp, Paper, and Fiberboard Manufacturing

Give a brief description of all operations at this facility including primary products or services:

WestRock CP, LLC operates an unbleached semi-chemical pulp and paperboard mill in Stevenson, Alabama. Unbleached pulp is produced by the sodium carbonate semi-chemical pulping process. Corrugated medium is manufactured from the semi-chemical pulp and recycled fiber. Process wastewater and storm water are discharged to the facility's wastewater treatment system. Additional storm water is discharged from permitted storm water outfalls.

Water Supply

Water Sources (check all that apply):

Surface Water

Municipal Water Utility

Please specify the City of the Municipal Water Utility:

Stevenson

Name of Utility	Million Gallons per Day (MGD)
Stevenson Utilities	0.011

Operator of Surface Intake	Million Gallons per Day (MGD)
WestRock CP, LLC	9.25
	Sum: 9.25

Cooling Water Intake Structure Information

Does the provider of your source water operate a surface water intake?

Yes

Name of Provider	Location of Provider	Latitude	Longitude
WestRock CP, LLC	Stevenson, AL	34.8578	-85.77812

Is the provider a public water system (defined as a system which provides water to the public for human consumption or which provides only treated water, not raw water)?

No

Is any water withdrawn from the source water used for cooling?

Yes

Using the average monthly measurements over any 12-month period, approximately what percentage of water withdrawn is used exclusively for cooling purposes?

6.9

Does the cooling water consist of treated effluent that would otherwise be discharged?

No

Is the cooling water used in a once-through cooling system?

No

Is the cooling water used in a closed cycle cooling system?

Yes

When was the intake installed?

1974

What is the maximum intake volume (maximum pumping capacity in gallons per day)?

13000000

What is the average intake volume (average intake pump rate in gallons per day average in any 30-day period)?

9250000

What is the actual intake flow (AIF) as defined in 40 CFR §125.92(a) (MGD)?

9.25

How is the intake operated?

Continuously

What is the mesh size of the screen on your intake (in inches)?

0.375

What is the intake screen flow-through area (in square feet)?

28.7

What is the through-screen design intake flow velocity (in ft/sec)?

0.70

What is the through-screen actual velocity (in ft/sec)?

0.50

What is the mechanism for cleaning the screen (e.g., does it rotate for cleaning)?

Rotating mechanical screen

Do you have any additional fish detraction technology on your intake?

No

Have there been any studies to determine the impact of the intake on aquatic organisms?

No

Attach a site map showing the location of the water intake in relation to the facility, shoreline, water depth, etc.

[Form 1 Topographic Map.pdf - 07/08/2025 10:47 AM](#)

Comment

NONE PROVIDED

Outfalls (1 of 5)

001

Please click below if this discharge no longer exists or is no longer required:

NONE PROVIDED

Outfall Identifier

001

Receiving Water

Tennessee River

Does the discharge enter the named receiving water via an unnamed tributary?

NONE PROVIDED

Indicate if either of the following characteristics apply to this discharge:

Process Water commingled with Stormwater

Estimated Average Daily Flow (MGD)

7.2

Monitoring/Sampling Point Location

34.86552844356262,-85.76956325952501

Outfalls (2 of 5)

002

Please click below if this discharge no longer exists or is no longer required:

NONE PROVIDED

Outfall Identifier

002

Receiving Water

Tennessee River

Does the discharge enter the named receiving water via an unnamed tributary?

NONE PROVIDED

Indicate if either of the following characteristics apply to this discharge:

None apply

Estimated Average Daily Flow (MGD)

0.007

Monitoring/Sampling Point Location

34.85987716729063,-85.77980439147949

Outfalls (3 of 5)

005

Please click below if this discharge no longer exists or is no longer required:

NONE PROVIDED

Outfall Identifier

005

Receiving Water

Tennessee River

Does the discharge enter the named receiving water via an unnamed tributary?

Unnamed Tributary

Indicate if either of the following characteristics apply to this discharge:

None apply

Estimated Average Daily Flow (MGD)

9.287

Monitoring/Sampling Point Location
34.8527317922504,-85.79218378029465

Outfalls (4 of 5)

023

Please click below if this discharge no longer exists or is no longer required:

NONE PROVIDED

Outfall Identifier

023

Receiving Water

Tennessee River

Does the discharge enter the named receiving water via an unnamed tributary?

Unnamed Tributary

Indicate if either of the following characteristics apply to this discharge:

Intermittent Discharge

Estimated Average Daily Flow (MGD)

0.35

Monitoring/Sampling Point Location

34.86855773867384,-85.77212833862305

Outfalls (5 of 5)

024

Please click below if this discharge no longer exists or is no longer required:

NONE PROVIDED

Outfall Identifier

024

Receiving Water

Bengis Creek

Does the discharge enter the named receiving water via an unnamed tributary?

Unnamed Tributary

Indicate if either of the following characteristics apply to this discharge:

Intermittent Discharge

Estimated Average Daily Flow (MGD)

0.002

Monitoring/Sampling Point Location

34.864232321824204,-85.80344413757324

Stormwater Outfalls (1 of 3)

006

Please click below if this discharge no longer exists or is no longer required:

NONE PROVIDED

Outfall Identifier

006

Receiving Water

Tennessee River

Does the discharge enter the named receiving water via an unnamed tributary?

Unnamed Tributary

Indicate if either of the following characteristics apply to this discharge:

Stormwater only (no comingled process waste water excluding air conditioner condensate and fire testing waters)

Monitoring/Sampling Point Location

34.84166700000000, -85.78611100000001

Stormwater Outfalls (2 of 3)

022

Please click below if this discharge no longer exists or is no longer required:

NONE PROVIDED

Outfall Identifier

022

Receiving Water

Tennessee River

Does the discharge enter the named receiving water via an unnamed tributary?

Unnamed Tributary

Indicate if either of the following characteristics apply to this discharge:

Intermittent Discharge

Monitoring/Sampling Point Location

34.85611100000000, -85.78083300000000

Stormwater Outfalls (3 of 3)

025

Please click below if this discharge no longer exists or is no longer required:

NONE PROVIDED

Outfall Identifier

025

Receiving Water

Bengis Creek

Does the discharge enter the named receiving water via an unnamed tributary?

Unnamed Tributary

Indicate if either of the following characteristics apply to this discharge:

Intermittent Discharge

Monitoring/Sampling Point Location

34.86166700000000, -85.80666700000000

Process Flow Schematic with Wastewater Treatment(s), If Applicable

For an example of a process flow diagram, please use the link below.

[Figure 1: Example of Process Flow Schematic](#)

Process Flow Schematic

[Form 2C Line Drawing.pdf - 07/08/2025 11:09 AM](#)

Comment

NONE PROVIDED

Anti-Degradation Evaluation

Is this a new or increased discharge that began after April 3, 1991?

No

Additional Information

Do you share an outfall with another facility?

No

Indicate if automatic sampling equipment or continuous wastewater flow metering equipment is being operated at this facility:

Current	Yes/No
Continuous Wastewater Flow Metering Equipment	Yes
Automatic Sampling Equipment	Yes

Indicate if installation automatic sampling equipment or continuous wastewater flow metering equipment planned at this facility:

Planned	Yes/No
Continuous Wastewater Flow Metering Equipment	N/A
Automatic Sampling Equipment	N/A

Please describe the equipment below:

DSN 001 and DSN 002 outfall discharge flow is continuously measured using flow meters; DSN 001 outfall is also equipped with an ISCO sampler.

DSN002 outfall is equipped with a Teledyne sampler.

Please attach the process schematic with sampling equipment locations.

[Form 2C Line Drawing.pdf - 07/08/2025 11:10 AM](#)

Comment

NONE PROVIDED

Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics (Consider production processes as well as air or water pollution treatment processes that may affect the discharge.)?

No

Do you use biocides, corrosion inhibitors, or chemical additives in your cooling or blowdown water?

Yes

The applicant must provide a list of the following information for each biocide or chemical:

- (1) Name and general composition of biocide or chemical (if composition is not provided on MSDS sheet)
- (2) 48-hour or 96-hour LC50 data for organisms representative of the biota of the waterway into which the discharge will ultimately reach. For freshwater, the fathead minnow (*Pimephales promelas*) and cladoceran (*Ceriodaphnia dubia*) are the test organisms. For salt water, the mysid shrimp and the sheepshead minnow or inland silverside are the test organisms. Other acceptable aquatic organisms may be allowed by the Department if sufficient information is provided. If the MSDS sheet does not provide data for the organisms specified above, the facility must provide the data unless the Department grants approval for an alternate organism.
- (3) Quantities to be used
- (4) Frequencies of use

- (5) Maximum proposed discharge concentrations
 (6) EPA registration of number, if applicable and is not provided on the MSDS sheet.

List of Biocides

Please list biocides below:
Nalco 7330
Nalco Purate
Nalco 1318
Nalco 7647
Nalco 10WB
Nalco 7648
Nalco C-9
Nalco 3DT487
Sodium Hypochlorite

Biocide/Corrosion Inhibitor Summary Sheet

NONE PROVIDED

Comment

NONE PROVIDED

Safety Data Sheets (SDS)

[Nalco 3DT487.pdf - 03/04/2025 04:48 PM](#)

[Nalco 1318.pdf - 06/09/2025 02:11 PM](#)

[Nalco 7330.pdf - 06/09/2025 02:11 PM](#)

[Nalco 7647.pdf - 06/09/2025 02:11 PM](#)

[Nalco Purate.pdf - 06/09/2025 02:11 PM](#)

[Sodium Hypochlorite.pdf - 06/09/2025 02:12 PM](#)

[Nalco 7648.pdf - 06/09/2025 02:20 PM](#)

[Nalco C-9.pdf - 06/09/2025 03:01 PM](#)

[Nalco 10WB.pdf - 06/09/2025 03:01 PM](#)

Comment

NONE PROVIDED

Treatment

Is any form of wastewater treatment (see list below) practiced at this facility?

Yes

Treatment devices or processes used or proposed for treating wastewater or sludge (check as many as appropriate).

Biological treatment

Sedimentation

Screen

Filtration

Biological treatment type:

Aerated Lagoons

Is any form of wastewater treatment (or changes to an existing wastewater treatment) planned for this facility within the next three years?

No

Facility Operational Characteristics

Indicate whether the facility discharge is:

Continuous through the year

Comments:

NONE PROVIDED

Non-Discharged Wastes

Are any waste liquids or sludges generated and not disposed of in the sanitary sewer system?

No

Does any outside firm remove any of the above checked wastes?

No

EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required.

Form 1 - General Information Form required for all applications

Form 2C - Should be submitted for facilities with existing discharge(s) of process wastewater.

Form 2D - Should be submitted for facilities that have not yet commenced discharge(s) of process wastewater.

Form 2E - Should be submitted for facilities who discharge non-process wastewater, such as non-contact cooling water or boiler blowdown.

Form 2F - Should be submitted for all discharges of storm water associated with an industrial activity.

The EPA application forms are found on the Department's website here.

EPA Form 1

EPA Form 1.pdf - 07/14/2025 02:43 PM

Comment

NONE PROVIDED

Additional EPA Forms (EPA Form 2C, 2D, 2E and/or 2F)

EPA Form 2C.pdf - 07/14/2025 02:43 PM

EPA Form 2F.pdf - 07/14/2025 02:43 PM

Comment

NONE PROVIDED

Other attachments (as needed)

NPDES Permit Renewal Application 2025.pdf - 07/14/2025 02:44 PM

Comment

NONE PROVIDED

Additional Attachments

Please attach any additional information as needed.

NONE PROVIDED

Comment

NONE PROVIDED

Application Preparer

Application Preparer**Prefix**

Ms.

First Name Last Name

Angela Aten

Title

NONE PROVIDED

Organization Name

WestRock CP, LLC

Phone Type Number Extension

Business 2564373305

Email

angela.aten@smurfitwestrock.com

Address

1611 County Road 85

Stevenson, AL 35772

Agreements and Signature(s)

SUBMISSION AGREEMENTS

- ☒ I am the owner of the account used to perform the electronic submission and signature.
- ☒ I have the authority to submit the data on behalf of the facility I am representing.
- ☒ I agree that providing the account credentials to sign the submission document constitutes an electronic signature equivalent to my written signature.
- ☒ I have reviewed the electronic form being submitted in its entirety, and agree to the validity and accuracy of the information contained within it to the best of my knowledge.

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

"I further certify under penalty of law that all analyses reported as less than detectable in this application or attachments thereto were performed using the EPA approved test method having the lowest detection limit for the substance tested."

NOTE: 335-6-5-.14 SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS.

The application shall be signed by a responsible official, a request for variance from categorical pretreatment standards, and a category determination request shall be signed by a responsible official, as indicated below:

- In the case of a corporation, by a principal executive officer of at least the level of vice president;
- In the case of a partnership, by a general partner;
- In the case of a sole proprietorship, by the proprietor; or
- In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official

Signed
By Stephan Atkins on 07/17/2025 at 11:06 AM



Delegation of Authority for Environmental Matters

U.S. and Canada Paper Mills and Extrusion Plants

As President of U.S. and Canada Mill Operations, I hereby ratify and confirm the authority of the individuals identified in Attachment A hereto (an "Authorized Person") to act as the duly authorized representative of Smurfit WestRock or its relevant subsidiary or affiliate for the purpose of overseeing environmental compliance matters at the facilities listed in Attachment A ("Covered Facilities"). This Delegation of Authority includes, without limitation, the authority to execute and submit all environmental applications, certifications, consent orders, reports, letters, and other documents required by or appropriate for the Covered Facilities. For paper mills and extrusion facilities located in the U.S., this Delegation expressly includes authority of the Authorized Person to act as the "Responsible Official" as that term is defined at 40 CFR § 70.2 and corresponding U.S. federal, state, and local laws and regulations.

To the extent permissible under applicable laws, an Authorized Person may re-delegate authority to another authorized and qualified manager within an assigned Covered Facility for the sole and exclusive purpose of signing and submitting a monthly Discharge Monitoring Report ("DMR") pursuant to a National Pollutant Discharge Elimination System permit for the Covered Facility. This re-delegation is to be used in those instances where the Authorized Person is unavailable or otherwise unable to sign the DMR.

This Delegation of Authority will remain in effect until revoked or superseded.

A handwritten signature in black ink, appearing to read 'T. Stigers', written over a horizontal line.

Thomas M. Stigers
President USA & Canada Paper/Mills

Effective Date: May 22, 2025

ATTACHMENT A

COVERED FACILITIES AND AUTHORIZED PERSONS

¹ The following General Managers shall have the authority to act as the Authorized Person for the listed Covered Facility:

COVERED FACILITY	GENERAL MANAGER	COVERED FACILITY	GENERAL MANAGER
1. Battle Creek, MI	Mark Cline	15. La Tuque, QC	Louis Bruneau
2. Cottonton, AL Sawmill	Anthony Lamar	16. Longview, WA	Steve Devlin
3. Covington, VA	Don Wilkinson	17. Low Moor, VA*	Mark Taylor
4. Cowpens, SC	Dan Hicks	18. Mahrt, AL Mill	Stephen Morgan
5. Dallas, TX	Kevin Moore	19. Missisquoi, VT	Charles Loisel
6. Demopolis, AL	David Coats	20. Point-Aux-Tremble, QC*	Karyne Trudeau
7. Dublin, GA	Brian Kinsey	21. Roanoke Rapids, NC	Ben White
8. Evadale, TX	John Hamilton	22. Silsbee, TX*	Malvern (Paul) Galloway
9. Fernandina Beach, FL	Dan Rowland	23. Solvay, NY	Scott Tingle
10. Florence, SC	Jon Miller	24. St. Paul, MN	Mike Gunderson
11. Forney, TX	Robert Brown	25. Stevenson, AL	Stephan Atkins
12. Hodge, LA	Brett Tremblay	26. Stroudsburg, PA	Chris Payne
13. Hopewell, VA	Wally McDonald	27. Tacoma, WA (Closed)	James McClure
14. Jacksonville, FL	Tom Crockett	28. West Point, VA	Tom Wadsworth

² The Regional Vice Presidents and Senior Vice Presidents within the Mill Operations business unit also shall have authority to act as the Authorized Person for each of their assigned, U.S. paper mills.

³ The General Manager, Extrusion Operations, also shall have authority to act as the Authorized Person for each of the U.S. extrusion plants. Extrusion plants are denoted with an asterisk (*) in the table above.

⁴ The paper mill and extrusion facility located in Canada also are subject to the Director's Resolution Regarding the Delegation of Environmental Authority for Smurfit Westrock Company of Canada Corp./Compagnie Westrock Du Canada Corp. for Paper Mills and Extrusion Operations, dated January 1, 2022.

⁵ Nina E. Butler, VP and Senior EHS Counsel shall have authority to act as the Authorized Person for each closed/decommissioned paper mill and extrusion facility.

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC	OMB No. 2040-0004 Expires 07/31/2026
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Form 1 NPDES		U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater GENERAL INFORMATION
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SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(F) AND (F)(1))

Activities Requiring an NPDES Permit	1.1	Applicants Not Required to Submit Form 1		
	1.1.1	Is the facility a new or existing publicly owned treatment works or has your permitting authority directed you to submit Form 2A? If yes, STOP. Do NOT complete Form 1. Complete Form 2A. If the facility is also a treatment works treating domestic sewage , you must also complete Form 2S.	☒ No	Is the facility a sludge-only facility (i.e., a facility that does not discharge wastewater to surface waters)? If yes, STOP. Do NOT complete Form 1. Complete Form 2S.
	1.2	Applicants Required to Submit Form 1		
	1.2.1	Is the facility a concentrated animal feeding operation or a concentrated aquatic animal production facility ? ☐ Yes → Complete Form 1 and Form 2B.	☒ No	1.2.2
	1.2.3	Is the facility a new manufacturing, commercial, mining, or silvicultural facility that has not yet commenced to discharge ? ☐ Yes → Complete Form 1 and Form 2D.	☒ No	1.2.4
	1.2.5	Is the facility a new or existing facility whose discharge is composed entirely of stormwater associated with industrial activity or whose discharge is composed of both stormwater and non-stormwater ? ☐ Yes → Complete Form 1 and Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15).	☒ No	1.2.6
				Is the facility a new or existing treatment works treating domestic sewage that discharges wastewater to surface waters? ☐ Yes → Complete Form 1, Form 2S, and any other applicable forms, as directed by your permitting authority.

SECTION 2. NAME, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(F)(2))

Name, Mailing Address, and Location	2.1	Facility Name		
		WestRock CP, LLC - Stevenson Mill		
	2.2	EPA Identification Number		
		110067613185		
	2.3	Facility Contact		
		Name (first and last) Angela Aten	Title Sr. Environmental Manager	Phone number (256) 437-3305
	Email address angela.aten@smurfitwestrock.com			

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC	OMB No. 2040-0004 Expires 07/31/2026
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Name, Mailing Address, and Location Continued	2.4	Facility Mailing Address		
		Street or P.O. box		
		P.O. Box 508		
		City or town	State	ZIP code
		Stevenson	AL	35772
	2.5	Facility Location		
		Street, route number, or other specific identifier		
		1611 County Road 85		
		County name	County code (if known)	
		Jackson		
	City or town	State	ZIP code	
	Stevenson	AL	35772	

SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(F)(3))			
SIC and NAICS Codes	3.1	SIC Code(s)	Description (optional)
		2631	Paperboard Mill
		2611	Pulp Mill
	3.2	NAICS Code(s)	Description (optional)
		322110	Pulp Mill
		322130	Paperboard Mill

SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(F)(4))		
Operator Information	4.1	Name of Operator
		WestRock CP, LLC
	4.2	Is the name you listed in Item 4.1 also the owner?
		☐ Yes ☒ No
	4.3	Operator Status
	☐ Public—federal ☐ Public—state ☐ Other public (specify) _____ ☒ Private ☐ Other (specify) _____	
4.4	Phone Number of Operator	
	(256) 437-3305	

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Operator Information Continued	<u>4.5</u>	Operator Address					
		Street or P.O. Box					
		P.O. Box 508					
		City or town Stevenson	State AL	ZIP code 35772			
		Email address of operator angela.aten@smurfitwestrock.com					
SECTION 5. INDIAN LAND (40 CFR 122.21(F)(5))							
Indian Land	<u>5.1</u>	Is the facility located on Indian Land? ☐ Yes ☒ No					
SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(F)(6))							
Existing Environmental Permits	<u>6.1</u>	Existing Environmental Permits (check all that apply and print or type the corresponding permit number for each)					
		☒ NPDES (discharges to surface water) AL0022314	☐ RCRA (hazardous wastes)	☐ UIC (underground injection of fluids)			
		☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)			
		☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☒ Other (specify) 705-0014 (Title V)			
SECTION 7. MAP (40 CFR 122.21(F)(7))							
Map	<u>7.1</u>	Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.) ☒ Yes ☐ CAFO—Not Applicable (See requirements in Form 2B.)					
SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(F)(8))							
Nature of Business	<u>8.1</u>	Describe the nature of your business. WestRock CP, LLC's Stevenson Mill is an integrated unbleached semi-chemical pulp and paperboard mill that manufactures corrugated medium from virgin semi-chemical pulp and recycled pulp.					
SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(F)(9))							
Cooling Water Intake Structures	<u>9.1</u>	Does your facility use cooling water? ☒ Yes ☐ No → SKIP to Item 10.1.					
	<u>9.2</u>	Identify the source of cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J may have additional application requirements at 40 CFR 122.21(r). Consult with your NPDES permitting authority to determine what specific information needs to be submitted and when.)					

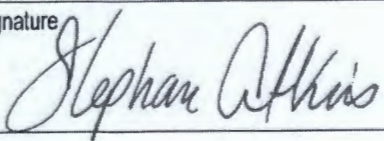
EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC
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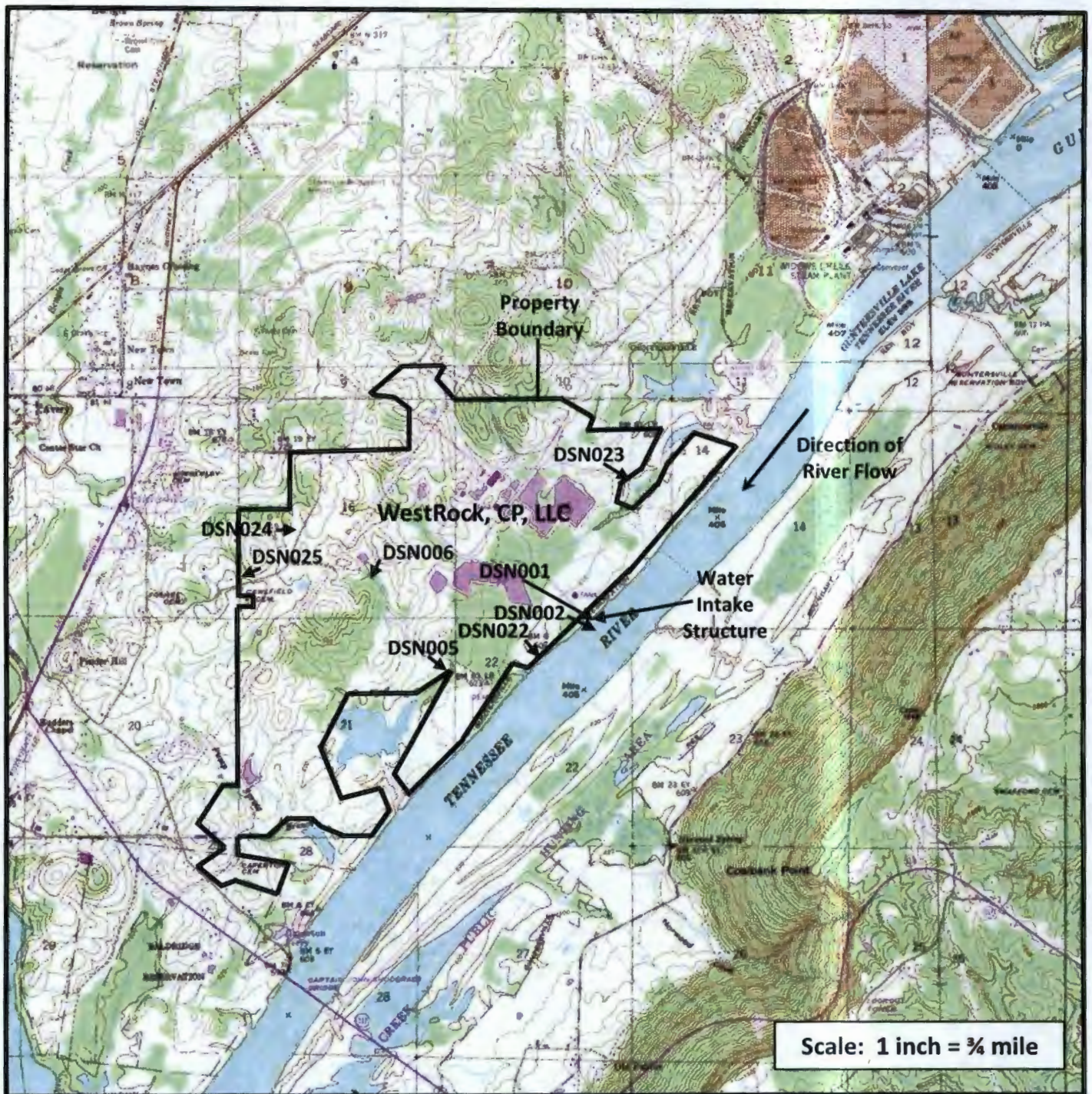
OMB No. 2040-0004
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SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(F)(10))

Variance Requests	<u>10.1</u>	Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(m)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)	
	☐	Fundamentally different factors (CWA Section 301(n))	☐ Water quality related effluent limitations (CWA Section 302(b)(2))
	☐	Non-conventional pollutants (CWA Section 301(c) and (g))	☐ Thermal discharges (CWA Section 316(a))
	☒	Not applicable	

SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))

Checklist and Certification Statement	<u>11.1</u>	In Column 1 below, mark the sections of Form 1 that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.	
		Column 1	Column 2
	☒	Section 1: Activities Requiring an NPDES Permit	☐ w/ attachments
	☒	Section 2: Name, Mailing Address, and Location	☐ w/ attachments
	☒	Section 3: SIC Codes	☐ w/ attachments
	☒	Section 4: Operator Information	☐ w/ attachments
	☒	Section 5: Indian Land	☐ w/ attachments
	☒	Section 6: Existing Environmental Permits	☒ w/ attachments
	☒	Section 7: Map	☒ w/ topographic map ☐ w/ additional attachments
	☒	Section 8: Nature of Business	☐ w/ attachments
	☒	Section 9: Cooling Water Intake Structures	☐ w/ attachments
	☒	Section 10.: Variance Requests	☐ w/ attachments
	☒	Section 11: Checklist and Certification Statement	☐ w/ attachments
	<u>11.2</u>	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)	
		Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
	Name (print or type first and last name) Stephan Atkins	Official title Interim General Manager	
	Signature 	Date signed 7-14-25	



**Figure 1. Topographic Map
WestRock CP, LLC – Stevenson Mill**

**Attachment to EPA Form 1 Item 6.1
Environmental Permits
WestRock CP, LLC – Stevenson Mill**

Type of Permit	Permit Number	Permit Held By
NPDES Individual Permit – Stevenson Mill	AL0022314	WestRock CP, LLC
Industrial Waste Landfill Permit – Stevenson Mill	36-06	WestRock CP, LLC
Scrap Tire License – Stevenson Mill	S0000008235	WestRock CP, LLC
Major Source Operating Permit – Stevenson Mill	705-0014	WestRock CP, LLC
ADECA Certificate of Use – Stevenson Mill	OWR-0002	WestRock CP, LLC
ADPH Radiation Permit	500	WestRock CP, LLC
Federal Communications Commission License	WQBK836	WestRock CP, LLC
Federal Communications Commission License	WQQJ448	WestRock CP, LLC

WestRock CP, LLC – Other Facilities in Alabama

Type of Permit	Permit Number	Permit Held By
NPDES General Permit – Abbeville Chip Mill	ALG060069	WestRock CP, LLC
NPDES General Permit – Snead Woodyard	ALG060544	WestRock CP, LLC

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC	OMB No. 2040-0004 Expires 07/31/2026
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Form 2C NPDES		U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS
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SECTION 1. OUTFALL LOCATION (40 CFR 122.21(G)(1))

Outfall Location	<u>1.1</u>	Provide information on each of the facility's outfalls in the table below.			
		Outfall Number	Receiving Water Name	Latitude	Longitude
		001	Tennessee River	34° 51' 18"	-085° 46' 52"
		002	Tennessee River	34° 51' 18"	-085° 46' 52"
		005	Unnamed Tributary to Tenn	34° 51' 19"	-085° 47' 21"

SECTION 2. LINE DRAWING (40 CFR 122.21(G)(2))

Line Drawing	<u>2.1</u>	Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C-1 at end of instructions for example.) ☒ Yes
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SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(G)(3))

Average Flows and Treatment	<u>3.1</u>	For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.		
		Outfall Number 001		
		Operations Contributing to Flow		
		Operation	Average Flow	
		Pulp Mill (Process)	3.2 mgd	
		Power & Recovery (Process)	3.1 mgd	
		Paper Machines (Process)	1.0 mgd	
		Woodyard (Storm Water), Landfill Leachate, Storm Water	<0.3 mgd	
		Treatment Units		
		Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Exhibit 2C-2	Final Disposal of Solid or Liquid Wastes Other Than by Discharge
		Screening	1-T	
		Sedimentation	1-U	Sludge is burned or land applic

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SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(G)(4))

Intermittent Flows	4.1	Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal? ☐ Yes ☒ No → SKIP to Section 5.						
	4.2	Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.						
				Frequency		Flow Rate		
				Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	Duration
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days

SECTION 5. PRODUCTION (40 CFR 122.21(G)(5))

Applicable ELGs	5.1	Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility? ☒ Yes ☐ No → SKIP to Section 6.		
	5.2	Provide the following information on applicable ELGs.		
		ELG Category	ELG Subcategory	Regulatory Citation
		Pulp, Paper, and Paperboard	Semi-Chemical Subcategory (Sodium Base)	40 CFR 430 Subpart F
Production-Based Limitations		Pulp, Paper, and Paperboard	Secondary Fiber Non-Deink Subcategory (Corrugated)	40 CFR 430 Subpart J
	5.3	Are any of the applicable ELGs expressed in terms of production (or other measure of operation)? ☒ Yes ☐ No → SKIP to Section 6.		
	5.4	Provide an actual measure of daily production expressed in terms and units of applicable ELGs.		
		Outfall Number	Operation, Product, or Material	Quantity per Day
	001	Semi-Chemical Pulp and Paper (Sodium Base Mills)	1540.9	Air Dry Tons
	001	Secondary Fiber Non-Deink (Corrugating Medium)	1197.0	Air Dry Tons

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<u>5.5</u>		Are you requesting alternative limits based on an anticipated increase in the actual production during the next permit term? (Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)
		☐ Yes ☒ No

SECTION 6. IMPROVEMENTS (40 CFR 122.21(G)(6))					
Upgrades and Improvements	<u>6.1</u>	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?			
		☐ Yes ☒ No → SKIP to Item 6.3.			
	<u>6.2</u>	Briefly identify each applicable project in the table below.			
		Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates
				Required	Projected
	<u>6.3</u>	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? <i>(optional item)</i>			
		☐ Yes ☐ No ☒ Not applicable			

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(G)(7))	
Effluent and Intake Characteristics	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.
	Table A. Conventional and Non-Conventional Pollutants
	<u>7.1</u> Are you requesting a waiver from your NPDES permitting authority for any Table A pollutants for any of your outfalls?
	☐ Yes ☒ No → SKIP to Item 7.3.
	<u>7.2</u> If yes, indicate the applicable outfalls below or check the appropriate box to indicate that you are requesting a waiver for all outfalls. Attach waiver request and other required information to the application.
	Outfall number _____ Outfall number _____ Outfall number _____
	☐ I am requesting a waiver for some pollutants at all outfalls. ☐ I am requesting a waiver for all pollutants at all outfalls → SKIP to Item 7.4.
	<u>7.3</u> Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?
☒ Yes	
Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants	
<u>7.4</u> Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3? (See end of instructions for exhibit.)	
☒ Yes ☐ No → SKIP to Item 7.8.	
<u>7.5</u> Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?	
☒ Yes	

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SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(G)(9))

Used or Manufactured Toxics	<u>8.1</u>	Is any pollutant listed in Table B a substance or a component of a substance used or manufactured at your facility as an intermediate or final product or byproduct? ☐ Yes ☒ No → SKIP to Section 9.	
	<u>8.2</u>	List the pollutants below. Attach additional sheets, if necessary.	
	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(G)(11))

Biological Toxicity Tests	<u>9.1</u>	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) a receiving water in relation to your discharge? ☒ Yes ☐ No → SKIP to Section 10.			
	<u>9.2</u>	Identify the tests and their purposes below.			
		Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
		Acute Toxicity	Annual Permit Requirement	☒ Yes ☐ No	08/27/2024
		Acute Toxicity	Annual Permit Requirement	☒ Yes ☐ No	12/21/2023
		Acute Toxicity	Annual Permit Requirement	☒ Yes ☐ No	11/21/2022

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(G)(12))

Contract Analyses	<u>10.1</u>	Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm? ☒ Yes ☐ No → SKIP to Section 11.		
	<u>10.2</u>	Provide information for each contract laboratory or consulting firm below.		
		Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
	Name of laboratory/firm	Southern Environmental Testing		
	Laboratory address	2919 Fairgrounds Road SW Decatur, AL 35603		
	Phone number	(256) 280-2567		
	Pollutant(s) analyzed	All except BOD, TSS, pH, and temperature		

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SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(G)(13))

Additional Information	<u>11.1</u>	Has the NPDES permitting authority requested additional information? ☐ Yes ☒ No → SKIP to Section 12.
	<u>11.2</u>	List the information requested and attach it to this application.
	1.	4.
	2.	5.
	3.	6.

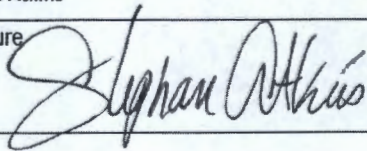
SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))

Checklist and Certification Statement	<u>12.1</u>	In Column 1 below, mark the sections of Form 2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.	
		Column 1	Column 2
		☒ Section 1: Outfall Location	☐ w/ attachments
		☒ Section 2: Line Drawing	☒ w/ line drawing ☐ w/ additional attachments
		☒ Section 3: Average Flows and Treatment	☒ w/ attachments ☐ w/ list of each user of privately owned treatment works
		☒ Section 4: Intermittent Flows	☐ w/ attachments
		☒ Section 5: Production	☐ w/ attachments
		☒ Section 6: Improvements	☐ w/ attachments ☐ w/ optional additional sheets describing any additional pollution control plans
		☒ Section 7: Effluent and Intake Characteristics	☐ w/ request for a waiver and supporting information ☐ w/ small business exemption request ☒ w/ Table A ☒ w/ Table C ☒ w/ Table E ☐ w/ explanation for identical outfalls ☐ w/ other attachments ☒ w/ Table B ☒ w/ Table D ☐ w/ analytical results as an attachment
		☒ Section 8: Used or Manufactured Toxics	☐ w/ attachments
		☒ Section 9: Biological Toxicity Tests	☐ w/ attachments
		☒ Section 10: Contract Analyses	☐ w/ attachments
		☒ Section 11: Additional Information	☐ w/ attachments
		☒ Section 12: Checklist and Certification Statement	☐ w/ attachments

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SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d)) (Continued)

Checklist and Certification Statement	12.2	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)	
		Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
		Name (print or type first and last name)	Official title
		Stephan Atkins	Interim General Manager
		Signature	Date signed
			7-14-25

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC	Outfall Number DSN001
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TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))¹

Pollutant	Waiver Requested (if applicable)	Units (specify)	Effluent				Intake (optional)		
			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses	
☐ Check here if you have applied to your NPDES permitting authority for a waiver for <i>all</i> of the pollutants listed on this table for the noted outfall.									
1. Biochemical oxygen demand (BOD ₅)	☐	Concentration	mg/L	129	71.71	50.14	904		
		Mass	lb/day	5,494	3,983	2,987	904		
2. Chemical oxygen demand (COD)	☐	Concentration	mg/L	452			1		
		Mass	lb/day	40,999			1		
3. Total organic carbon (TOC)	☐	Concentration	mg/L	131			1		
		Mass	lb/day	11,883			1		
4. Total suspended solids (TSS)	☐	Concentration	mg/L	6,510	415	128	1,077		
		Mass	lb/day	336,381	21,256	7,686	1,077		
5. Ammonia (as N)	☐	Concentration	mg/L	2.00	2.00	0.364	40		
		Mass	lb/day	146	119	21.8	40		
6. Flow	☐	Rate	MGD	10.88	8.33	7.19	1,246		
7. Temperature	☐	winter	°C	24.90	20.35	17.35	385		
		summer	°C	33.10	31.30	29.11	320		
8. pH	☐	minimum	Standard units	6.30	7.42	7.86	1,069		
		maximum	Standard units	8.72	8.22	7.86	1,069		

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC	Outfall Number DSN001
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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)			
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses		
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.												
Section 1. Toxic Metals, Cyanide, and Total Phenols													
1.1	Antimony, total (7440-36-0)	☒	☐	☐	Concentration	mg/L	0.00156			1			
					Mass	lb/day	0.142			1			
1.2	Arsenic, total (7440-38-2)	☒	☐	☐	Concentration	mg/L	0.00406			1			
					Mass	lb/day	0.368			1			
1.3	Beryllium, total (7440-41-7)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.0454			1			
1.4	Cadmium, total (7440-43-9)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.0454			1			
1.5	Chromium, total (7440-47-3)	☒	☐	☐	Concentration	mg/L	0.00257			1			
					Mass	lb/day	0.233			1			
1.6	Copper, total (7440-50-8)	☒	☐	☐	Concentration	mg/L	0.00486			1			
					Mass	lb/day	0.441			1			
1.7	Lead, total (7439-92-1)	☒	☐	☐	Concentration	mg/L	0.00124			1			
					Mass	lb/day	0.112			1			
1.8	Mercury, total (7439-97-6)	☒	☐	☐	Concentration	mg/L	<0.0002			1			
					Mass	lb/day	<0.0181			1			
1.9	Nickel, total (7440-02-0)	☒	☐	☐	Concentration	mg/L	0.00582			1			
					Mass	lb/day	0.528			1			
1.10	Selenium, total (7782-49-2)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.0454			1			
1.11	Silver, total (7440-22-4)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.0454			1			

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☒	☐	☐	Concentration	mg/L	<0.0005			1		
					Mass	lb/day	<0.0454			1		
1.13	Zinc, total (7440-66-6)	☒	☐	☐	Concentration	mg/L	0.0546			1		
					Mass	lb/day	4.95			1		
1.14	Cyanide, total (57-12-5)	☒	☐	☐	Concentration	mg/L	<0.0050			1		
					Mass	lb/day	<0.454			1		
1.15	Phenols, total	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.2	Acrylonitrile (107-13-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.3	Benzene (71-43-2)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.4	Bromoform (75-25-2)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.5	Carbon tetrachloride (56-23-5)	☒	☐	☐	Concentration	mg/L	<0.002			1		
					Mass	lb/day	<0.181			1		
2.6	Chlorobenzene (108-90-7)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.7	Chlorodibromomethane (124-48-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.8	Chloroethane (75-00-3)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.10	Chloroform (67-66-3)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.11	Dichlorobromomethane (75-27-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.12	1,1-dichloroethane (75-34-3)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.13	1,2-dichloroethane (107-06-2)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.14	1,1-dichloroethylene (75-35-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.15	1,2-dichloropropane (78-87-5)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.16	1,3-dichloropropylene (542-75-6)	☒	☐	☐	Concentration	mg/L	<0.002			1		
					Mass	lb/day	<0.181			1		
2.17	Ethylbenzene (100-41-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.18	Methyl bromide (74-83-9)	☒	☐	☐	Concentration	mg/L	<0.005			1		
					Mass	lb/day	<0.454			1		
2.19	Methyl chloride (74-87-3)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.20	Methylene chloride (75-09-2)	☒	☐	☐	Concentration	mg/L	<0.005			1		
					Mass	lb/day	<0.454			1		
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.23	Toluene (108-88-3)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.24	1,2-trans-dichloroethylene (156-60-5)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.25	1,1,1-trichloroethane (71-55-6)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.26	1,1,2-trichloroethane (79-00-5)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.27	Trichloroethylene (79-01-6)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
2.28	Vinyl chloride (75-01-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)												
3.1	2-chlorophenol (95-57-8)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
3.2	2,4-dichlorophenol (120-83-2)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
3.3	2,4-dimethylphenol (105-67-9)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
3.4	4,6-dinitro-o-cresol (534-52-1)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
3.5	2,4-dinitrophenol (51-28-5)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
3.7	4-nitrophenol (100-02-7)	☒	☐	☐	Concentration	mg/L	<0.08			1		
					Mass	lb/day	<7.26			1		
3.8	p-chloro-m-cresol (59-50-7)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
3.9	Pentachlorophenol (87-86-5)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
3.10	Phenol (108-95-2)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
3.11	2,4,6-trichlorophenol (88-05-2)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)												
4.1	Acenaphthene (83-32-9)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.2	Acenaphthylene (208-96-8)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.3	Anthracene (120-12-7)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.4	Benzidine (92-87-5)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.5	Benzo (a) anthracene (56-55-3)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.6	Benzo (a) pyrene (50-32-8)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.8	Benzo (ghi) perylene (191-24-2)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.9	Benzo (k) fluoranthene (207-08-9)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.11	Bis (2-chloroethyl) ether (111-44-4)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☒	☐	☐	Concentration	mg/L	<0.16			1		
					Mass	lb/day	<14.5			1		
4.14	4-bromophenyl phenyl ether (101-55-3)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.15	Butyl benzyl phthalate (85-68-7)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.16	2-chloronaphthalene (91-58-7)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.18	Chrysene (218-01-9)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.19	Dibenzo (a,h) anthracene (53-70-3)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
4.21	1,3-dichlorobenzene (541-73-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
4.22	1,4-dichlorobenzene (106-46-7)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
4.23	3,3-dichlorobenzidine (91-94-1)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.24	Diethyl phthalate (84-66-2)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.25	Dimethyl phthalate (131-11-3)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.26	Di-n-butyl phthalate (84-74-2)	☒	☐	☐	Concentration	mg/L	<0.08			1		
					Mass	lb/day	<7.26			1		
4.27	2,4-dinitrotoluene (121-14-2)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.28	2,6-dinitrotoluene (606-20-2)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.29	Di-n-octyl phthalate (117-84-0)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.31	Fluoranthene (206-44-0)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.32	Fluorene (86-73-7)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.34	Hexachlorobutadiene (87-68-3)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.35	Hexachlorocyclopentadiene (77-47-4)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.36	Hexachloroethane (67-72-1)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.38	Isophorone (78-59-1)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.39	Naphthalene (91-20-3)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.40	Nitrobenzene (98-95-3)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.41	N-nitrosodimethylamine (62-75-9)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.42	N-nitrosodi-n-propylamine (621-64-7)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.43	N-nitrosodiphenylamine (86-30-6)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.44	Phenanthrene (85-01-8)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		
4.45	Pyrene (129-00-0)	☒	☐	☐	Concentration	mg/L	<0.04			1		
					Mass	lb/day	<3.63			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0907			1		
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☒	☐	☐	Concentration	mg/L	<0.0000017			1		
					Mass	lb/day	<0.000154			1		
5.2	α-BHC (319-84-6)	☒	☐	☐	Concentration	mg/L	<0.0000026			1		
					Mass	lb/day	<0.000236			1		
5.3	β-BHC (319-85-7)	☒	☐	☐	Concentration	mg/L	<0.0000075			1		
					Mass	lb/day	<0.000680			1		
5.4	γ-BHC (58-89-9)	☒	☐	☐	Concentration	mg/L	<0.0000046			1		
					Mass	lb/day	<0.000417			1		
5.5	δ-BHC (319-86-8)	☒	☐	☐	Concentration	mg/L	<0.0000091			1		
					Mass	lb/day	<0.000825			1		
5.6	Chlordane (57-74-9)	☒	☐	☐	Concentration	mg/L	<0.000024			1		
					Mass	lb/day	<0.00218			1		
5.7	4,4'-DDT (50-29-3)	☒	☐	☐	Concentration	mg/L	<0.0000078			1		
					Mass	lb/day	<0.000708			1		
5.8	4,4'-DDE (72-55-9)	☒	☐	☐	Concentration	mg/L	<0.0000050			1		
					Mass	lb/day	<0.000454			1		
5.9	4,4'-DDD (72-54-8)	☒	☐	☐	Concentration	mg/L	<0.0000036			1		
					Mass	lb/day	<0.000327			1		
5.10	Dieldrin (60-57-1)	☒	☐	☐	Concentration	mg/L	<0.0000021			1		
					Mass	lb/day	<0.000190			1		
5.11	α-endosulfan (115-29-7)	☒	☐	☐	Concentration	mg/L	<0.0000044			1		
					Mass	lb/day	<0.000399			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☒	☐	☐	Concentration	mg/L	<0.0000095			1		
					Mass	lb/day	<0.000862			1		
5.13	Endosulfan sulfate (1031-07-8)	☒	☐	☐	Concentration	mg/L	<0.0000058			1		
					Mass	lb/day	<0.000526			1		
5.14	Endrin (72-20-8)	☒	☐	☐	Concentration	mg/L	<0.000011			1		
					Mass	lb/day	<0.000998			1		
5.15	Endrin aldehyde (7421-93-4)	☒	☐	☐	Concentration	mg/L	<0.0000067			1		
					Mass	lb/day	<0.000608			1		
5.16	Heptachlor (76-44-8)	☒	☐	☐	Concentration	mg/L	<0.0000068			1		
					Mass	lb/day	<0.000617			1		
5.17	Heptachlor epoxide (1024-57-3)	☒	☐	☐	Concentration	mg/L	<0.0000077			1		
					Mass	lb/day	<0.000698			1		
5.18	PCB-1242 (53469-21-9)	☒	☐	☐	Concentration	mg/L	<0.00014			1		
					Mass	lb/day	<0.0127			1		
5.19	PCB-1254 (11097-69-1)	☒	☐	☐	Concentration	mg/L	<0.00012			1		
					Mass	lb/day	<0.0109			1		
5.20	PCB-1221 (11104-28-2)	☒	☐	☐	Concentration	mg/L	<0.00016			1		
					Mass	lb/day	<0.0145			1		
5.21	PCB-1232 (11141-16-5)	☒	☐	☐	Concentration	mg/L	<0.00013			1		
					Mass	lb/day	<0.0118			1		
5.22	PCB-1248 (12672-29-6)	☒	☐	☐	Concentration	mg/L	<0.00010			1		
					Mass	lb/day	<0.00907			1		
5.23	PCB-1260 (11096-82-5)	☒	☐	☐	Concentration	mg/L	<0.000049			1		
					Mass	lb/day	<0.00444			1		
5.24	PCB-1016 (12674-11-2)	☒	☐	☐	Concentration	mg/L	<0.000068			1		
					Mass	lb/day	<0.00617			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☒	☐	☐	Concentration	mg/L	<0.00016			1		
					Mass	lb/day	<0.0145			1		

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)			
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses		
☐ Check here if you believe all pollutants in Table C to be present in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.											
☐ Check here if you believe all pollutants in Table C to be absent in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.											
1. Bromide (24959-67-9)	☐	☒	Concentration	mg/L	<0.50		1				
			Mass	lb/day	<45		1				
2. Chlorine, total residual	☐	☒	Concentration								
			Mass								
3. Color	☒	☐	Concentration	PCU	1050		1				
			Mass								
4. Fecal coliform	☐	☒	Concentration								
			Mass								
5. Fluoride (16984-48-8)	☒	☐	Concentration	mg/L	0.374		1				
			Mass	lb/day	33.9		1				
6. Nitrate-nitrite	☒	☐	Concentration	mg/L	2.52	2.52	0.625	22			
			Mass	lb/day	162	143	37.5	22			
7. Nitrogen, total organic (as N)	☒	☐	Concentration	mg/L	24.47	24.47	11.1	22			
			Mass	lb/day	1,786	1,259	665	22			
8. Oil and grease	☐	☒	Concentration	mg/L	<5.00		1				
			Mass	lb/day	<454		1				
9. Phosphorus (as P), total (7723-14-0)	☒	☐	Concentration	mg/L	2.30	2.30	1.19	22			
			Mass	lb/day	139	123	71.3	22			
10. Sulfate (as SO ₄) (14808-79-8)	☒	☐	Concentration	mg/L	126		1				
			Mass	lb/day	11,430		1				
11. Sulfide (as S)	☐	☒	Concentration								
			Mass								

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO ₃) (14265-45-3)	☐	☒	Concentration							
				Mass							
13.	Surfactants	☐	☒	Concentration							
				Mass							
14.	Aluminum, total (7429-90-5)	☒	☐	Concentration	mg/L	0.564			1		
				Mass	lb/day	51.2			1		
15.	Barium, total (7440-39-3)	☒	☐	Concentration	mg/L	0.215			1		
				Mass	lb/day	19.5			1		
16.	Boron, total (7440-42-8)	☒	☐	Concentration	mg/L	1.10			1		
				Mass	lb/day	99.8			1		
17.	Cobalt, total (7440-48-4)	☒	☐	Concentration	mg/L	0.00189			1		
				Mass	lb/day	0.171			1		
18.	Iron, total (7439-89-6)	☒	☐	Concentration	mg/L	0.464			1		
				Mass	lb/day	42.1			1		
19.	Magnesium, total (7439-95-4)	☒	☐	Concentration	mg/L	8.73			1		
				Mass	lb/day	792			1		
20.	Molybdenum, total (7439-98-7)	☒	☐	Concentration	mg/L	0.00107			1		
				Mass	lb/day	0.097			1		
21.	Manganese, total (7439-96-5)	☒	☐	Concentration	mg/L	0.379			1		
				Mass	lb/day	34.4			1		
22.	Tin, total (7440-31-5)	☐	☒	Concentration	mg/L	<0.0010			1		
				Mass	lb/day	<0.0907			1		
23.	Titanium, total (7440-32-6)	☒	☐	Concentration	mg/L	0.00562			1		
				Mass	lb/day	0.510			1		

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24. Radioactivity									
Alpha, total	☒	☐	Concentration	pCi/L	5.39			1	
			Mass						
Beta, total	☒	☐	Concentration	pCi/L	29.4			1	
			Mass						
Radium, total	☒	☐	Concentration	pCi/L	0.370			1	
			Mass						
Radium 226, total	☒	☐	Concentration	pCi/L	0.431			1	
			Mass						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☒		
2.	Acetaldehyde	☒	☐	Industry reporting guidance for Toxic Release Inventory	<0.03 mg/L
3.	Allyl alcohol	☐	☒		
4.	Allyl chloride	☐	☒		
5.	Amyl acetate	☐	☒		
6.	Aniline	☐	☒		
7.	Benzonitrile	☐	☒		
8.	Benzyl chloride	☐	☒		
9.	Butyl acetate	☐	☒		
10.	Butylamine	☐	☒		
11.	Captan	☐	☒		
12.	Carbaryl	☐	☒		
13.	Carbofuran	☐	☒		
14.	Carbon disulfide	☐	☒		
15.	Chlorpyrifos	☐	☒		
16.	Coumaphos	☐	☒		
17.	Cresol	☐	☒		
18.	Crotonaldehyde	☐	☒		
19.	Cyclohexane	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☒		
21.	Diazinon	☐	☒		
22.	Dicamba	☐	☒		
23.	Dichlobenil	☐	☒		
24.	Dichlone	☐	☒		
25.	2,2-dichloropropionic acid	☐	☒		
26.	Dichlorvos	☐	☒		
27.	Diethyl amine	☐	☒		
28.	Dimethyl amine	☐	☒		
29.	Dinitrobenzene	☐	☒		
30.	Diquat	☐	☒		
31.	Disulfoton	☐	☒		
32.	Diuron	☐	☒		
33.	Epichlorohydrin	☐	☒		
34.	Ethion	☐	☒		
35.	Ethylene diamine	☐	☒		
36.	Ethylene dibromide	☐	☒		
37.	Formaldehyde	☐	☒		
38.	Furfural	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☒		
40.	Isoprene	☐	☒		
41.	Isopropanolamine	☐	☒		
42.	Kelthane	☐	☒		
43.	Kepone	☐	☒		
44.	Malathion	☐	☒		
45.	Mercaptodimethur	☐	☒		
46.	Methoxychlor	☐	☒		
47.	Methyl mercaptan	☐	☒		
48.	Methyl methacrylate	☐	☒		
49.	Methyl parathion	☐	☒		
50.	Mevinphos	☐	☒		
51.	Mexacarbate	☐	☒		
52.	Monoethyl amine	☐	☒		
53.	Monomethyl amine	☐	☒		
54.	Naled	☐	☒		
55.	Naphthenic acid	☐	☒		
56.	Nitrotoluene	☐	☒		
57.	Parathion	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☒		
59.	Phosgene	☐	☒		
60.	Propargite	☐	☒		
61.	Propylene oxide	☐	☒		
62.	Pyrethrins	☐	☒		
63.	Quinoline	☐	☒		
64.	Resorcinol	☐	☒		
65.	Strontium	☐	☒		
66.	Strychnine	☐	☒		
67.	Styrene	☐	☒		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☒		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☒		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☒		
71.	Trichlorofon	☐	☒		
72.	Triethanolamine	☐	☒		
73.	Triethylamine	☐	☒		
74.	Trimethylamine	☐	☒		
75.	Uranium	☐	☒		
76.	Vanadium	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☒		
78.	Xylene	☐	☒		
79.	Xylenol	☐	☒		
80.	Zirconium	☐	☒		

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

	Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
			Believed Present	Believed Absent	
	2,3,7,8-TCDD	☐	☐	☒	

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TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))¹

Pollutant	Waiver Requested (if applicable)	Units (specify)	Effluent				Intake (optional)		
			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses	
☐ Check here if you have applied to your NPDES permitting authority for a waiver for <i>all</i> of the pollutants listed on this table for the noted outfall.									
1. Biochemical oxygen demand (BOD ₅)	☐	Concentration	mg/L	3.00	1.80	0.40	177		
		Mass	lb/day	1.00	0.227	0.050	177		
2. Chemical oxygen demand (COD)	☐	Concentration	mg/L	37.0			1		
		Mass	lb/day	61.4			1		
3. Total organic carbon (TOC)	☐	Concentration	mg/L	7.17			1		
		Mass	lb/day	11.9			1		
4. Total suspended solids (TSS)	☐	Concentration	mg/L	10.0	8.00	5.00	178		
		Mass	lb/day	1.17	1.17	0.305	178		
5. Ammonia (as N)	☐	Concentration	mg/L	10.6			1		
		Mass	lb/day	17.6			1		
6. Flow	☐	Rate	MGD	0.199	0.0519	0.00764	1,150		
7. Temperature	☐	winter	°C	°C	24.9		1		
		summer	°C	°C	33.1		1		
8. pH	☐	minimum	Standard units	S.U.	6.10	6.40	6.87	178	
		maximum	Standard units	S.U.	8.20	7.57	6.87	178	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)			
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses		
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.												
Section 1. Toxic Metals, Cyanide, and Total Phenols													
1.1	Antimony, total (7440-36-0)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.00083			1			
1.2	Arsenic, total (7440-38-2)	☒	☐	☐	Concentration	mg/L	0.00213			1			
					Mass	lb/day	0.00353			1			
1.3	Beryllium, total (7440-41-7)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.00083			1			
1.4	Cadmium, total (7440-43-9)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.00083			1			
1.5	Chromium, total (7440-47-3)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.00083			1			
1.6	Copper, total (7440-50-8)	☒	☐	☐	Concentration	mg/L	0.00133			1			
					Mass	lb/day	0.00221			1			
1.7	Lead, total (7439-92-1)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.00083			1			
1.8	Mercury, total (7439-97-6)	☒	☐	☐	Concentration	mg/L	<0.0002			1			
					Mass	lb/day	<0.00033			1			
1.9	Nickel, total (7440-02-0)	☒	☐	☐	Concentration	mg/L	0.00239			1			
					Mass	lb/day	0.00397			1			
1.10	Selenium, total (7782-49-2)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.00083			1			
1.11	Silver, total (7440-22-4)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.00083			1			

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☒	☐	☐	Concentration	mg/L	<0.0005			1		
					Mass	lb/day	<0.00083			1		
1.13	Zinc, total (7440-66-6)	☒	☐	☐	Concentration	mg/L	0.0209			1		
					Mass	lb/day	0.0347			1		
1.14	Cyanide, total (57-12-5)	☒	☐	☐	Concentration	mg/L	<0.0050			1		
					Mass	lb/day	<0.00830			1		
1.15	Phenols, total	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☒	☐	☐	Concentration	mg/L	0.00186			1		
					Mass	lb/day	0.00309			1		
2.2	Acrylonitrile (107-13-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.3	Benzene (71-43-2)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.4	Bromoform (75-25-2)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.5	Carbon tetrachloride (56-23-5)	☒	☐	☐	Concentration	mg/L	<0.002			1		
					Mass	lb/day	<0.0033			1		
2.6	Chlorobenzene (108-90-7)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.7	Chlorodibromomethane (124-48-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.8	Chloroethane (75-00-3)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.10	Chloroform (67-66-3)	☒	☐	☐	Concentration	mg/L	0.0106			1		
					Mass	lb/day	0.0176			1		
2.11	Dichlorobromomethane (75-27-4)	☒	☐	☐	Concentration	mg/L	0.00155			1		
					Mass	lb/day	0.00257			1		
2.12	1,1-dichloroethane (75-34-3)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.13	1,2-dichloroethane (107-06-2)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.14	1,1-dichloroethylene (75-35-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.15	1,2-dichloropropane (78-87-5)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.16	1,3-dichloropropylene (542-75-6)	☒	☐	☐	Concentration	mg/L	<0.002			1		
					Mass	lb/day	<0.0033			1		
2.17	Ethylbenzene (100-41-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.18	Methyl bromide (74-83-9)	☒	☐	☐	Concentration	mg/L	<0.005			1		
					Mass	lb/day	<0.0083			1		
2.19	Methyl chloride (74-87-3)	☒	☐	☐	Concentration	mg/L	0.00405			1		
					Mass	lb/day	0.00672			1		
2.20	Methylene chloride (75-09-2)	☒	☐	☐	Concentration	mg/L	<0.005			1		
					Mass	lb/day	<0.0083			1		
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.23	Toluene (108-88-3)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.24	1,2-trans-dichloroethylene (156-60-5)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.25	1,1,1-trichloroethane (71-55-6)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.26	1,1,2-trichloroethane (79-00-5)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.27	Trichloroethylene (79-01-6)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
2.28	Vinyl chloride (75-01-4)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)												
3.1	2-chlorophenol (95-57-8)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
3.2	2,4-dichlorophenol (120-83-2)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
3.3	2,4-dimethylphenol (105-67-9)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
3.4	4,6-dinitro-o-cresol (534-52-1)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
3.5	2,4-dinitrophenol (51-28-5)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
3.7	4-nitrophenol (100-02-7)	☒	☐	☐	Concentration	mg/L	<0.008			1		
					Mass	lb/day	<0.013			1		
3.8	p-chloro-m-cresol (59-50-7)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
3.9	Pentachlorophenol (87-86-5)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
3.10	Phenol (108-95-2)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
3.11	2,4,6-trichlorophenol (88-05-2)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)												
4.1	Acenaphthene (83-32-9)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.2	Acenaphthylene (208-96-8)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.3	Anthracene (120-12-7)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.4	Benzidine (92-87-5)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.5	Benzo (a) anthracene (56-55-3)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.6	Benzo (a) pyrene (50-32-8)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.8	Benzo (ghi) perylene (191-24-2)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.9	Benzo (k) fluoranthene (207-08-9)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.11	Bis (2-chloroethyl) ether (111-44-4)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☒	☐	☐	Concentration	mg/L	<0.016			1		
					Mass	lb/day	<0.0066			1		
4.14	4-bromophenyl phenyl ether (101-55-3)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.15	Butyl benzyl phthalate (85-68-7)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.16	2-chloronaphthalene (91-58-7)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.18	Chrysene (218-01-9)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.19	Dibenzo (a,h) anthracene (53-70-3)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
4.21	1,3-dichlorobenzene (541-73-1)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
4.22	1,4-dichlorobenzene (106-46-7)	☒	☐	☐	Concentration	mg/L	<0.001			1		
					Mass	lb/day	<0.0017			1		
4.23	3,3-dichlorobenzidine (91-94-1)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.24	Diethyl phthalate (84-66-2)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.25	Dimethyl phthalate (131-11-3)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.26	Di-n-butyl phthalate (84-74-2)	☒	☐	☐	Concentration	mg/L	<0.008			1		
					Mass	lb/day	<0.013			1		
4.27	2,4-dinitrotoluene (121-14-2)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.28	2,6-dinitrotoluene (606-20-2)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.29	Di-n-octyl phthalate (117-84-0)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.31	Fluoranthene (206-44-0)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.32	Fluorene (86-73-7)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.34	Hexachlorobutadiene (87-68-3)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.35	Hexachlorocyclopentadiene (77-47-4)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.36	Hexachloroethane (67-72-1)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.38	Isophorone (78-59-1)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.39	Naphthalene (91-20-3)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.40	Nitrobenzene (98-95-3)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.41	N-nitrosodimethylamine (62-75-9)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.42	N-nitrosodi-n-propylamine (621-64-7)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.43	N-nitrosodiphenylamine (86-30-6)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.44	Phenanthrene (85-01-8)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		
4.45	Pyrene (129-00-0)	☒	☐	☐	Concentration	mg/L	<0.004			1		
					Mass	lb/day	<0.0066			1		

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☒	☐	☐	Concentration	mg/L	<0.001				1	
					Mass	lb/day	<0.0017				1	
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☐	☐	☒	Concentration							
					Mass							
5.2	α -BHC (319-84-6)	☐	☐	☒	Concentration							
					Mass							
5.3	β -BHC (319-85-7)	☐	☐	☒	Concentration							
					Mass							
5.4	γ -BHC (58-89-9)	☐	☐	☒	Concentration							
					Mass							
5.5	δ -BHC (319-86-8)	☐	☐	☒	Concentration							
					Mass							
5.6	Chlordane (57-74-9)	☐	☐	☒	Concentration							
					Mass							
5.7	4,4'-DDT (50-29-3)	☐	☐	☒	Concentration							
					Mass							
5.8	4,4'-DDE (72-55-9)	☐	☐	☒	Concentration							
					Mass							
5.9	4,4'-DDD (72-54-8)	☐	☐	☒	Concentration							
					Mass							
5.10	Dieldrin (60-57-1)	☐	☐	☒	Concentration							
					Mass							
5.11	α -endosulfan (115-29-7)	☐	☐	☒	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☐	☐	☒	Concentration						
					Mass						
5.13	Endosulfan sulfate (1031-07-8)	☐	☐	☒	Concentration						
					Mass						
5.14	Endrin (72-20-8)	☐	☐	☒	Concentration						
					Mass						
5.15	Endrin aldehyde (7421-93-4)	☐	☐	☒	Concentration						
					Mass						
5.16	Heptachlor (76-44-8)	☐	☐	☒	Concentration						
					Mass						
5.17	Heptachlor epoxide (1024-57-3)	☐	☐	☒	Concentration						
					Mass						
5.18	PCB-1242 (53469-21-9)	☐	☐	☒	Concentration						
					Mass						
5.19	PCB-1254 (11097-69-1)	☐	☐	☒	Concentration						
					Mass						
5.20	PCB-1221 (11104-28-2)	☐	☐	☒	Concentration						
					Mass						
5.21	PCB-1232 (11141-16-5)	☐	☐	☒	Concentration						
					Mass						
5.22	PCB-1248 (12672-29-6)	☐	☐	☒	Concentration						
					Mass						
5.23	PCB-1260 (11096-82-5)	☐	☐	☒	Concentration						
					Mass						
5.24	PCB-1016 (12674-11-2)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☐	☐	☒	Concentration						
					Mass						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)			
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses		
☐ Check here if you believe all pollutants in Table C to be present in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.											
☐ Check here if you believe all pollutants in Table C to be absent in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.											
1. Bromide (24959-67-9)	☐	☒	Concentration	mg/L	<0.50			1			
			Mass	lb/day	<0.83			1			
2. Chlorine, total residual	☒	☐	Concentration	mg/L	15.0	15.0	0.48	36			
			Mass	lb/day	24.9	6.49	0.031	36			
3. Color	☒	☐	Concentration	PCU	15.0			1			
			Mass								
4. Fecal coliform	☐	☒	Concentration	1PN/100m	<10			1			
			Mass								
5. Fluoride (16984-48-8)	☒	☐	Concentration	mg/L	0.348			1			
			Mass	lb/day	0.577			1			
6. Nitrate-nitrite	☒	☐	Concentration	mg/L	1.84			1			
			Mass	lb/day	3.05			1			
7. Nitrogen, total organic (as N)	☒	☐	Concentration	mg/L	1.30			1			
			Mass	lb/day	2.16			1			
8. Oil and grease	☐	☒	Concentration	mg/L	<5.00			1			
			Mass	lb/day	<8.30			1			
9. Phosphorus (as P), total (7723-14-0)	☒	☐	Concentration	mg/L	2.35			1			
			Mass	lb/day	3.90			1			
10. Sulfate (as SO ₄) (14808-79-8)	☒	☐	Concentration	mg/L	48.8			1			
			Mass	lb/day	81.0			1			
11. Sulfide (as S)	☐	☒	Concentration	mg/L	<0.01			1			
			Mass	lb/day	<0.017			1			

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO ₃) (14265-45-3)	☐	☒	Concentration	mg/L	<2.00			1		
				Mass	lb/day	<3.32			1		
13.	Surfactants	☐	☒	Concentration	mg/L	<0.025			1		
				Mass	lb/day	<0.042			1		
14.	Aluminum, total (7429-90-5)	☒	☐	Concentration	mg/L	0.0234			1		
				Mass	lb/day	0.0388			1		
15.	Barium, total (7440-39-3)	☒	☐	Concentration	mg/L	0.0274			1		
				Mass	lb/day	0.0455			1		
16.	Boron, total (7440-42-8)	☒	☐	Concentration	mg/L	0.0733			1		
				Mass	lb/day	0.122			1		
17.	Cobalt, total (7440-48-4)	☒	☐	Concentration	mg/L	0.00188			1		
				Mass	lb/day	0.00312			1		
18.	Iron, total (7439-89-6)	☒	☐	Concentration	mg/L	1.12			1		
				Mass	lb/day	1.86			1		
19.	Magnesium, total (7439-95-4)	☒	☐	Concentration	mg/L	10.7			1		
				Mass	lb/day	17.8			1		
20.	Molybdenum, total (7439-98-7)	☒	☐	Concentration	mg/L	0.00249			1		
				Mass	lb/day	0.00413			1		
21.	Manganese, total (7439-96-5)	☒	☐	Concentration	mg/L	0.180			1		
				Mass	lb/day	0.299			1		
22.	Tin, total (7440-31-5)	☐	☒	Concentration	mg/L	<0.0010			1		
				Mass	lb/day	<0.0017			1		
23.	Titanium, total (7440-32-6)	☒	☐	Concentration	mg/L	0.00133			1		
				Mass	lb/day	0.00221			1		

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24.	Radioactivity									
	Alpha, total	☐	☒	Concentration						
				Mass						
	Beta, total	☐	☒	Concentration						
				Mass						
	Radium, total	☐	☒	Concentration						
				Mass						
	Radium 226, total	☐	☒	Concentration						
				Mass						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☒		
2.	Acetaldehyde	☐	☒		
3.	Allyl alcohol	☐	☒		
4.	Allyl chloride	☐	☒		
5.	Amyl acetate	☐	☒		
6.	Aniline	☐	☒		
7.	Benzonitrile	☐	☒		
8.	Benzyl chloride	☐	☒		
9.	Butyl acetate	☐	☒		
10.	Butylamine	☐	☒		
11.	Captan	☐	☒		
12.	Carbaryl	☐	☒		
13.	Carbofuran	☐	☒		
14.	Carbon disulfide	☐	☒		
15.	Chlorpyrifos	☐	☒		
16.	Coumaphos	☐	☒		
17.	Cresol	☐	☒		
18.	Crotonaldehyde	☐	☒		
19.	Cyclohexane	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☒		
21.	Diazinon	☐	☒		
22.	Dicamba	☐	☒		
23.	Dichlobenil	☐	☒		
24.	Dichlone	☐	☒		
25.	2,2-dichloropropionic acid	☐	☒		
26.	Dichlorvos	☐	☒		
27.	Diethyl amine	☐	☒		
28.	Dimethyl amine	☐	☒		
29.	Dinitrobenzene	☐	☒		
30.	Diquat	☐	☒		
31.	Disulfoton	☐	☒		
32.	Diuron	☐	☒		
33.	Epichlorohydrin	☐	☒		
34.	Ethion	☐	☒		
35.	Ethylene diamine	☐	☒		
36.	Ethylene dibromide	☐	☒		
37.	Formaldehyde	☐	☒		
38.	Furfural	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☒		
40.	Isoprene	☐	☒		
41.	Isopropanolamine	☐	☒		
42.	Kelthane	☐	☒		
43.	Kepone	☐	☒		
44.	Malathion	☐	☒		
45.	Mercaptodimethur	☐	☒		
46.	Methoxychlor	☐	☒		
47.	Methyl mercaptan	☐	☒		
48.	Methyl methacrylate	☐	☒		
49.	Methyl parathion	☐	☒		
50.	Mevinphos	☐	☒		
51.	Mexacarbate	☐	☒		
52.	Monoethyl amine	☐	☒		
53.	Monomethyl amine	☐	☒		
54.	Naled	☐	☒		
55.	Naphthenic acid	☐	☒		
56.	Nitrotoluene	☐	☒		
57.	Parathion	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☒		
59.	Phosgene	☐	☒		
60.	Propargite	☐	☒		
61.	Propylene oxide	☐	☒		
62.	Pyrethrins	☐	☒		
63.	Quinoline	☐	☒		
64.	Resorcinol	☐	☒		
65.	Strontium	☐	☒		
66.	Strychnine	☐	☒		
67.	Styrene	☐	☒		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☒		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☒		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☒		
71.	Trichlorofon	☐	☒		
72.	Triethanolamine	☐	☒		
73.	Triethylamine	☐	☒		
74.	Trimethylamine	☐	☒		
75.	Uranium	☐	☒		
76.	Vanadium	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☒		
78.	Xylene	☐	☒		
79.	Xylenol	☐	☒		
80.	Zirconium	☐	☒		

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☒	

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TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))¹

Pollutant	Waiver Requested (if applicable)	Units (specify)	Effluent				Intake (optional)		
			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses	
☐ Check here if you have applied to your NPDES permitting authority for a waiver for <i>all</i> of the pollutants listed on this table for the noted outfall.									
1. Biochemical oxygen demand (BOD ₅)	☐	Concentration	mg/L	4.0	4.0	1.9	13		
		Mass	lb/day	310	310	147	13		
2. Chemical oxygen demand (COD)	☐	Concentration	mg/L	<10.0			1		
		Mass	lb/day	<774			1		
3. Total organic carbon (TOC)	☐	Concentration	mg/L	13.8			1		
		Mass	lb/day	1,070			1		
4. Total suspended solids (TSS)	☐	Concentration	mg/L	24	24	14	13		
		Mass	lb/day	1,860	1,860	1,080	13		
5. Ammonia (as N)	☐	Concentration	mg/L	0.136			1		
		Mass	lb/day	10.5			1		
6. Flow	☐	Rate	MGD	9.29	9.29	9.29	13		
7. Temperature (winter)	☐	°C	°C	24.9			1		
		°C	°C	33.1			1		
8. pH (minimum)	☐	Standard units	s.u.	6.3	6.3	7.1	13		
		Standard units	s.u.	8.1	8.1	7.1	13		

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)			
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses		
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.												
Section 1. Toxic Metals, Cyanide, and Total Phenols													
1.1	Antimony, total (7440-36-0)	☒	☐	☐	Concentration	mg/L	0.00120			1			
					Mass	lb/day	0.093			1			
1.2	Arsenic, total (7440-38-2)	☒	☐	☐	Concentration	mg/L	0.00189			1			
					Mass	lb/day	0.146			1			
1.3	Beryllium, total (7440-41-7)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.039			1			
1.4	Cadmium, total (7440-43-9)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.039			1			
1.5	Chromium, total (7440-47-3)	☒	☐	☐	Concentration	mg/L	0.00389			1			
					Mass	lb/day	0.30			1			
1.6	Copper, total (7440-50-8)	☒	☐	☐	Concentration	mg/L	0.00233			1			
					Mass	lb/day	0.18			1			
1.7	Lead, total (7439-92-1)	☒	☐	☐	Concentration	mg/L	0.00052			1			
					Mass	lb/day	0.040			1			
1.8	Mercury, total (7439-97-6)	☒	☐	☐	Concentration	mg/L	<0.0002			1			
					Mass	lb/day	<0.015			1			
1.9	Nickel, total (7440-02-0)	☒	☐	☐	Concentration	mg/L	0.00210			1			
					Mass	lb/day	0.16			1			
1.10	Selenium, total (7782-49-2)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.039			1			
1.11	Silver, total (7440-22-4)	☒	☐	☐	Concentration	mg/L	<0.0005			1			
					Mass	lb/day	<0.039			1			

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☒	☐	☐	Concentration	mg/L	<0.0005			1		
					Mass	lb/day	<0.039			1		
1.13	Zinc, total (7440-66-6)	☒	☐	☐	Concentration	mg/L	0.00927			1		
					Mass	lb/day	0.718			1		
1.14	Cyanide, total (57-12-5)	☒	☐	☐	Concentration	mg/L	<0.0050			1		
					Mass	lb/day	<0.39			1		
1.15	Phenols, total	☒	☐	☐	Concentration	mg/L	<0.02			1		
					Mass	lb/day	<1.55			1		

Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)

2.1	Acrolein (107-02-8)	☐	☐	☒	Concentration							
					Mass							
2.2	Acrylonitrile (107-13-1)	☐	☐	☒	Concentration							
					Mass							
2.3	Benzene (71-43-2)	☐	☐	☒	Concentration							
					Mass							
2.4	Bromoform (75-25-2)	☐	☐	☒	Concentration							
					Mass							
2.5	Carbon tetrachloride (56-23-5)	☐	☐	☒	Concentration							
					Mass							
2.6	Chlorobenzene (108-90-7)	☐	☐	☒	Concentration							
					Mass							
2.7	Chlorodibromomethane (124-48-1)	☐	☐	☒	Concentration							
					Mass							
2.8	Chloroethane (75-00-3)	☐	☐	☒	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☐	☐	☒	Concentration						
					Mass						
2.10	Chloroform (67-66-3)	☐	☐	☒	Concentration						
					Mass						
2.11	Dichlorobromomethane (75-27-4)	☐	☐	☒	Concentration						
					Mass						
2.12	1,1-dichloroethane (75-34-3)	☐	☐	☒	Concentration						
					Mass						
2.13	1,2-dichloroethane (107-06-2)	☐	☐	☒	Concentration						
					Mass						
2.14	1,1-dichloroethylene (75-35-4)	☐	☐	☒	Concentration						
					Mass						
2.15	1,2-dichloropropane (78-87-5)	☐	☐	☒	Concentration						
					Mass						
2.16	1,3-dichloropropylene (542-75-6)	☐	☐	☒	Concentration						
					Mass						
2.17	Ethylbenzene (100-41-4)	☐	☐	☒	Concentration						
					Mass						
2.18	Methyl bromide (74-83-9)	☐	☐	☒	Concentration						
					Mass						
2.19	Methyl chloride (74-87-3)	☐	☐	☒	Concentration						
					Mass						
2.20	Methylene chloride (75-09-2)	☐	☐	☒	Concentration						
					Mass						
2.21	1,1,1,2-tetrachloroethane (79-34-5)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☐	☐	☒	Concentration						
					Mass						
2.23	Toluene (108-88-3)	☐	☐	☒	Concentration						
					Mass						
2.24	1,2-trans-dichloroethylene (156-60-5)	☐	☐	☒	Concentration						
					Mass						
2.25	1,1,1-trichloroethane (71-55-6)	☐	☐	☒	Concentration						
					Mass						
2.26	1,1,2-trichloroethane (79-00-5)	☐	☐	☒	Concentration						
					Mass						
2.27	Trichloroethylene (79-01-6)	☐	☐	☒	Concentration						
					Mass						
2.28	Vinyl chloride (75-01-4)	☐	☐	☒	Concentration						
					Mass						
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)											
3.1	2-chlorophenol (95-57-8)	☐	☐	☒	Concentration						
					Mass						
3.2	2,4-dichlorophenol (120-83-2)	☐	☐	☒	Concentration						
					Mass						
3.3	2,4-dimethylphenol (105-67-9)	☐	☐	☒	Concentration						
					Mass						
3.4	4,6-dinitro-o-cresol (534-52-1)	☐	☐	☒	Concentration						
					Mass						
3.5	2,4-dinitrophenol (51-28-5)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☐	☐	☒	Concentration						
					Mass						
3.7	4-nitrophenol (100-02-7)	☐	☐	☒	Concentration						
					Mass						
3.8	p-chloro-m-cresol (59-50-7)	☐	☐	☒	Concentration						
					Mass						
3.9	Pentachlorophenol (87-86-5)	☐	☐	☒	Concentration						
					Mass						
3.10	Phenol (108-95-2)	☐	☐	☒	Concentration						
					Mass						
3.11	2,4,6-trichlorophenol (88-05-2)	☐	☐	☒	Concentration						
					Mass						
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)											
4.1	Acenaphthene (83-32-9)	☐	☐	☒	Concentration						
					Mass						
4.2	Acenaphthylene (208-96-8)	☐	☐	☒	Concentration						
					Mass						
4.3	Anthracene (120-12-7)	☐	☐	☒	Concentration						
					Mass						
4.4	Benzidine (92-87-5)	☐	☐	☒	Concentration						
					Mass						
4.5	Benzo (a) anthracene (56-55-3)	☐	☐	☒	Concentration						
					Mass						
4.6	Benzo (a) pyrene (50-32-8)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☐	☐	☒	Concentration						
					Mass						
4.8	Benzo (ghi) perylene (191-24-2)	☐	☐	☒	Concentration						
					Mass						
4.9	Benzo (k) fluoranthene (207-08-9)	☐	☐	☒	Concentration						
					Mass						
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☐	☐	☒	Concentration						
					Mass						
4.11	Bis (2-chloroethyl) ether (111-44-4)	☐	☐	☒	Concentration						
					Mass						
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☐	☐	☒	Concentration						
					Mass						
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☐	☐	☒	Concentration						
					Mass						
4.14	4-bromophenyl phenyl ether (101-55-3)	☐	☐	☒	Concentration						
					Mass						
4.15	Butyl benzyl phthalate (85-68-7)	☐	☐	☒	Concentration						
					Mass						
4.16	2-chloronaphthalene (91-58-7)	☐	☐	☒	Concentration						
					Mass						
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☐	☐	☒	Concentration						
					Mass						
4.18	Chrysene (218-01-9)	☐	☐	☒	Concentration						
					Mass						
4.19	Dibenzo (a,h) anthracene (53-70-3)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))'

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☐	☐	☒	Concentration						
					Mass						
4.21	1,3-dichlorobenzene (541-73-1)	☐	☐	☒	Concentration						
					Mass						
4.22	1,4-dichlorobenzene (106-46-7)	☐	☐	☒	Concentration						
					Mass						
4.23	3,3-dichlorobenzidine (91-94-1)	☐	☐	☒	Concentration						
					Mass						
4.24	Diethyl phthalate (84-66-2)	☐	☐	☒	Concentration						
					Mass						
4.25	Dimethyl phthalate (131-11-3)	☐	☐	☒	Concentration						
					Mass						
4.26	Di-n-butyl phthalate (84-74-2)	☐	☐	☒	Concentration						
					Mass						
4.27	2,4-dinitrotoluene (121-14-2)	☐	☐	☒	Concentration						
					Mass						
4.28	2,6-dinitrotoluene (606-20-2)	☐	☐	☒	Concentration						
					Mass						
4.29	Di-n-octyl phthalate (117-84-0)	☐	☐	☒	Concentration						
					Mass						
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☐	☐	☒	Concentration						
					Mass						
4.31	Fluoranthene (206-44-0)	☐	☐	☒	Concentration						
					Mass						
4.32	Fluorene (86-73-7)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☐	☐	☒	Concentration						
					Mass						
4.34	Hexachlorobutadiene (87-68-3)	☐	☐	☒	Concentration						
					Mass						
4.35	Hexachlorocyclopentadiene (77-47-4)	☐	☐	☒	Concentration						
					Mass						
4.36	Hexachloroethane (67-72-1)	☐	☐	☒	Concentration						
					Mass						
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☐	☐	☒	Concentration						
					Mass						
4.38	Isophorone (78-59-1)	☐	☐	☒	Concentration						
					Mass						
4.39	Naphthalene (91-20-3)	☐	☐	☒	Concentration						
					Mass						
4.40	Nitrobenzene (98-95-3)	☐	☐	☒	Concentration						
					Mass						
4.41	N-nitrosodimethylamine (62-75-9)	☐	☐	☒	Concentration						
					Mass						
4.42	N-nitrosodi-n-propylamine (621-64-7)	☐	☐	☒	Concentration						
					Mass						
4.43	N-nitrosodiphenylamine (86-30-6)	☐	☐	☒	Concentration						
					Mass						
4.44	Phenanthrene (85-01-8)	☐	☐	☒	Concentration						
					Mass						
4.45	Pyrene (129-00-0)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☐	☐	☒	Concentration Mass						
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)											
5.1	Aldrin (309-00-2)	☐	☐	☒	Concentration Mass						
5.2	α-BHC (319-84-6)	☐	☐	☒	Concentration Mass						
5.3	β-BHC (319-85-7)	☐	☐	☒	Concentration Mass						
5.4	γ-BHC (58-89-9)	☐	☐	☒	Concentration Mass						
5.5	δ-BHC (319-86-8)	☐	☐	☒	Concentration Mass						
5.6	Chlordane (57-74-9)	☐	☐	☒	Concentration Mass						
5.7	4,4'-DDT (50-29-3)	☐	☐	☒	Concentration Mass						
5.8	4,4'-DDE (72-55-9)	☐	☐	☒	Concentration Mass						
5.9	4,4'-DDD (72-54-8)	☐	☐	☒	Concentration Mass						
5.10	Dieldrin (60-57-1)	☐	☐	☒	Concentration Mass						
5.11	α-endosulfan (115-29-7)	☐	☐	☒	Concentration Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☐	☐	☒	Concentration						
					Mass						
5.13	Endosulfan sulfate (1031-07-8)	☐	☐	☒	Concentration						
					Mass						
5.14	Endrin (72-20-8)	☐	☐	☒	Concentration						
					Mass						
5.15	Endrin aldehyde (7421-93-4)	☐	☐	☒	Concentration						
					Mass						
5.16	Heptachlor (76-44-8)	☐	☐	☒	Concentration						
					Mass						
5.17	Heptachlor epoxide (1024-57-3)	☐	☐	☒	Concentration						
					Mass						
5.18	PCB-1242 (53469-21-9)	☐	☐	☒	Concentration						
					Mass						
5.19	PCB-1254 (11097-69-1)	☐	☐	☒	Concentration						
					Mass						
5.20	PCB-1221 (11104-28-2)	☐	☐	☒	Concentration						
					Mass						
5.21	PCB-1232 (11141-16-5)	☐	☐	☒	Concentration						
					Mass						
5.22	PCB-1248 (12672-29-6)	☐	☐	☒	Concentration						
					Mass						
5.23	PCB-1260 (11096-82-5)	☐	☐	☒	Concentration						
					Mass						
5.24	PCB-1016 (12674-11-2)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☐	☐	☒	Concentration						
					Mass						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)			
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses		
☐ Check here if you believe all pollutants in Table C to be present in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.											
☐ Check here if you believe all pollutants in Table C to be absent in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.											
1. Bromide (24959-67-9)	☐	☒	Concentration								
			Mass								
2. Chlorine, total residual	☐	☒	Concentration								
			Mass								
3. Color	☒	☐	Concentration	PCU	53.0		1				
			Mass								
4. Fecal coliform	☐	☒	Concentration								
			Mass								
5. Fluoride (16984-48-8)	☐	☒	Concentration								
			Mass								
6. Nitrate-nitrite	☐	☒	Concentration	mg/L	<0.60		1				
			Mass	lb/day	<46		1				
7. Nitrogen, total organic (as N)	☒	☐	Concentration	mg/L	1.37		1				
			Mass	lb/day	106		1				
8. Oil and grease	☐	☒	Concentration								
			Mass								
9. Phosphorus (as P), total (7723-14-0)	☒	☐	Concentration	mg/L	0.120		1				
			Mass	lb/day	9.30		1				
10. Sulfate (as SO ₄) (14808-79-8)	☒	☐	Concentration	mg/L	46.0		1				
			Mass	lb/day	3,560		1				
11. Sulfide (as S)	☐	☒	Concentration								
			Mass								

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO ₃) (14265-45-3)	☐	☒	Concentration						
				Mass						
13.	Surfactants	☐	☒	Concentration						
				Mass						
14.	Aluminum, total (7429-90-5)	☒	☐	Concentration	mg/L	0.235		1		
				Mass	lb/day	18.2		1		
15.	Barium, total (7440-39-3)	☒	☐	Concentration	mg/L	0.049		1		
				Mass	lb/day	3.8		1		
16.	Boron, total (7440-42-8)	☒	☐	Concentration	mg/L	0.0756		1		
				Mass	lb/day	5.86		1		
17.	Cobalt, total (7440-48-4)	☒	☐	Concentration	mg/L	0.000946		1		
				Mass	lb/day	0.0733		1		
18.	Iron, total (7439-89-6)	☒	☐	Concentration	mg/L	1.38		1		
				Mass	lb/day	107		1		
19.	Magnesium, total (7439-95-4)	☒	☐	Concentration	mg/L	10.2		1		
				Mass	lb/day	790		1		
20.	Molybdenum, total (7439-98-7)	☒	☐	Concentration	mg/L	0.00226		1		
				Mass	lb/day	0.175		1		
21.	Manganese, total (7439-96-5)	☒	☐	Concentration	mg/L	0.780		1		
				Mass	lb/day	60.4		1		
22.	Tin, total (7440-31-5)	☐	☒	Concentration	mg/L	<0.0010		1		
				Mass	lb/day	<0.078		1		
23.	Titanium, total (7440-32-6)	☒	☐	Concentration	mg/L	0.00690		1		
				Mass	lb/day	0.535		1		

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24. Radioactivity									
Alpha, total	☐	☒	Concentration						
			Mass						
Beta, total	☐	☒	Concentration						
			Mass						
Radium, total	☐	☒	Concentration						
			Mass						
Radium 226, total	☐	☒	Concentration						
			Mass						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☒		
2.	Acetaldehyde	☐	☒		
3.	Allyl alcohol	☐	☒		
4.	Allyl chloride	☐	☒		
5.	Amyl acetate	☐	☒		
6.	Aniline	☐	☒		
7.	Benzonitrile	☐	☒		
8.	Benzyl chloride	☐	☒		
9.	Butyl acetate	☐	☒		
10.	Butylamine	☐	☒		
11.	Captan	☐	☒		
12.	Carbaryl	☐	☒		
13.	Carbofuran	☐	☒		
14.	Carbon disulfide	☐	☒		
15.	Chlorpyrifos	☐	☒		
16.	Coumaphos	☐	☒		
17.	Cresol	☐	☒		
18.	Crotonaldehyde	☐	☒		
19.	Cyclohexane	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☒		
21.	Diazinon	☐	☒		
22.	Dicamba	☐	☒		
23.	Dichlobenil	☐	☒		
24.	Dichlone	☐	☒		
25.	2,2-dichloropropionic acid	☐	☒		
26.	Dichlorvos	☐	☒		
27.	Diethyl amine	☐	☒		
28.	Dimethyl amine	☐	☒		
29.	Dinitrobenzene	☐	☒		
30.	Diquat	☐	☒		
31.	Disulfoton	☐	☒		
32.	Diuron	☐	☒		
33.	Epichlorohydrin	☐	☒		
34.	Ethion	☐	☒		
35.	Ethylene diamine	☐	☒		
36.	Ethylene dibromide	☐	☒		
37.	Formaldehyde	☐	☒		
38.	Furfural	☐	☒		

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC	Outfall Number DSN005
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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☒		
40.	Isoprene	☐	☒		
41.	Isopropanolamine	☐	☒		
42.	Kelthane	☐	☒		
43.	Kepone	☐	☒		
44.	Malathion	☐	☒		
45.	Mercaptodimethur	☐	☒		
46.	Methoxychlor	☐	☒		
47.	Methyl mercaptan	☐	☒		
48.	Methyl methacrylate	☐	☒		
49.	Methyl parathion	☐	☒		
50.	Mevinphos	☐	☒		
51.	Mexacarbate	☐	☒		
52.	Monoethyl amine	☐	☒		
53.	Monomethyl amine	☐	☒		
54.	Naled	☐	☒		
55.	Naphthenic acid	☐	☒		
56.	Nitrotoluene	☐	☒		
57.	Parathion	☐	☒		

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC	Outfall Number DSN005
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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☒		
59.	Phosgene	☐	☒		
60.	Propargite	☐	☒		
61.	Propylene oxide	☐	☒		
62.	Pyrethrins	☐	☒		
63.	Quinoline	☐	☒		
64.	Resorcinol	☐	☒		
65.	Strontium	☐	☒		
66.	Strychnine	☐	☒		
67.	Styrene	☐	☒		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☒		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☒		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☒		
71.	Trichlorofon	☐	☒		
72.	Triethanolamine	☐	☒		
73.	Triethylamine	☐	☒		
74.	Trimethylamine	☐	☒		
75.	Uranium	☐	☒		
76.	Vanadium	☐	☒		

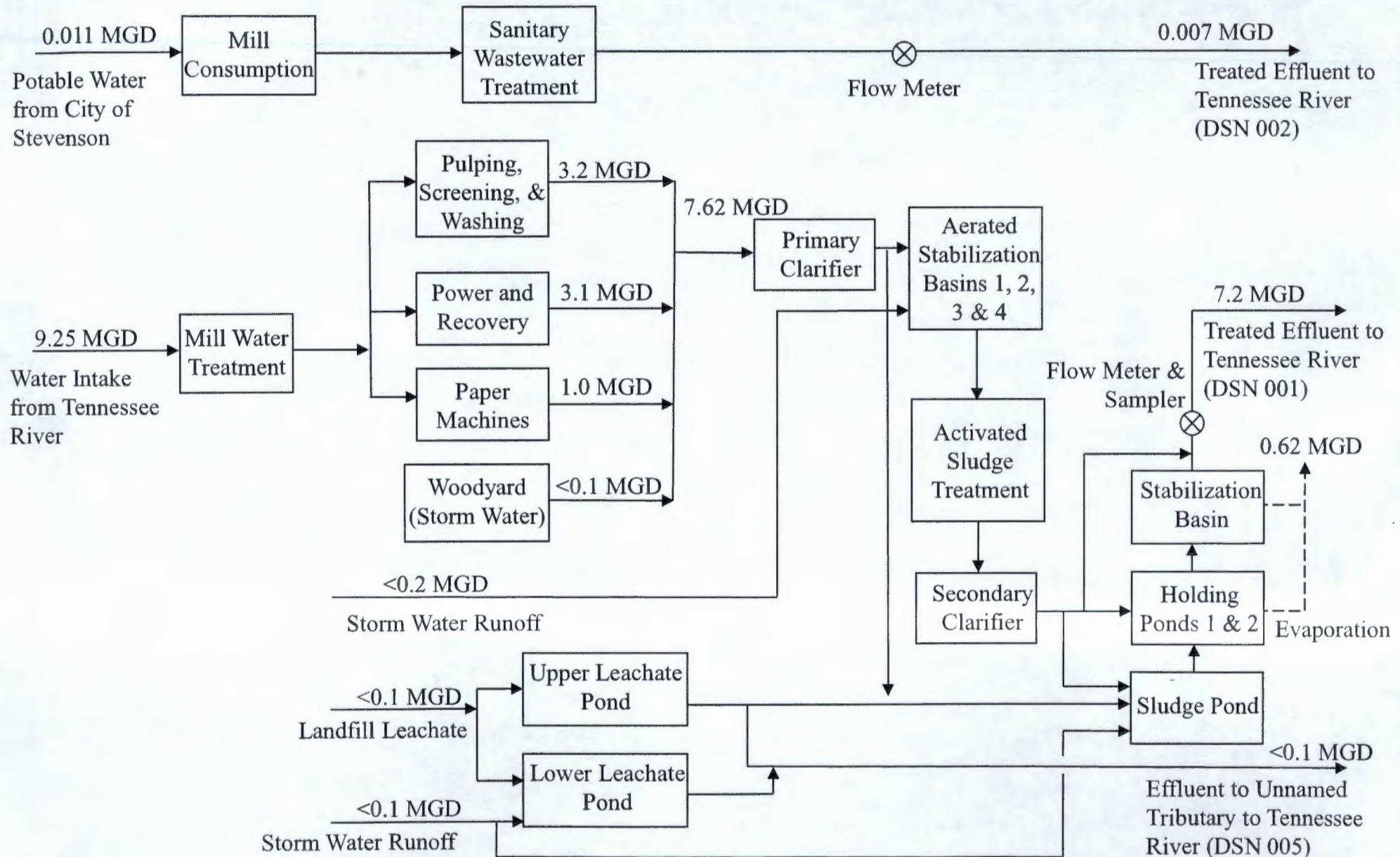
EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC	Outfall Number DSN005
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TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☒	

2.1. Line Drawing for WestRock CP, LLC – Stevenson Mill



Attachment to Form 2C Item 3.1 – Treatment Units for DSN 001**WestRock CP, LLC's Stevenson Mill****NPDES Permit No. AL0022314**

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Exhibit 2C-2	Final Disposal of Solid or Liquid Wastes Other Than by Discharge
Screening	1-T	
Sedimentation	1-U	
Aerated Lagoons	3-B	
Sludge Dewatering	5-C	
Stabilization Ponds	3-G	
Sludge Pond	5-T	
Pressure Filtration	5-R	
Landfill	5-Q	
Land Application	5-P	
Discharge to Surface Water	4-A	

Primary clarifier sludge is either burned on site in the wood fired boilers for energy recovery, beneficially reused on site by land application, or placed in the facility's industrial landfill. Secondary wastewater treatment residuals are either beneficially reused on site or placed in the facility's industrial landfill.

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson
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Form
2F
NPDES



U.S Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater
STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(G)(1))

Outfall Location	1.1	Provide information on each of the facility's outfalls in the table below			
		Outfall Number	Receiving Water Name	Latitude	Longitude
		005	UT to Tennessee River	34° 50' 56"	-085° 47' 42"
		006	UT to Tennessee River	34° 51' 38"	-085° 47' 42"
		022	UT to Tennessee River	34° 51' 22"	-085° 46' 51"
		023	UT to Tennessee River	34° 52' 05"	-085° 46' 20"
		024	UT to Bengis Creek	34° 51' 50"	-085° 48' 09"
		025	UT to Bengis Creek	34° 51' 42"	-085° 48' 24"

SECTION 2. IMPROVEMENTS (40 CFR 122.21(G)(6))

Improvements	2.1	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application? ☐ Yes ☒ No → SKIP to Section 3.				
	2.2	Briefly identify each applicable project in the table below.				
		Brief Identification and Description of Project	Affected Outfalls (list outfall numbers)	Source(s) of Discharge	Final Compliance Dates	
					Required	Projected
	2.3	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? <i>(optional item)</i> ☐ Yes ☒ No				

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SECTION 3. SITE DRAINAGE MAP (40 CFR 122.26(C)(1)(I)(A))

Site Drainage Map	3.1	Have you attached a site drainage map containing all required information to this application? (See instructions for specific guidance.)
	☒	Yes

SECTION 4. POLLUTANT SOURCES (40 CFR 122.26(C)(1)(I)(B))

Pollutant Sources	4.1	Provide information on the facility's pollutant sources in the table below.				
		Outfall Number	Impervious Surface Area (within a mile radius of the facility)		Total Surface Area Drained (within a mile radius of the facility)	
		005	14.7	specify units acres	24.5	specify units acres
		006	24.1	specify units acres	40.1	specify units acres
		022	0	specify units acres	20	specify units acres
		023	44.3	specify units acres	145	specify units acres
		024	25	specify units acres	30	specify units acres
		025	1	specify units acres	5	specify units acres
	4.2	Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.)				
		See attached table for narrative description of significant materials and summary of materials management practices.				
	4.3	Provide the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff. (See instructions for specific guidance.)				
		Stormwater Treatment				
		Outfall Number	Control Measures and Treatment			Codes from Exhibit 2F-1 (list)
		005	Sedimentation and Discharge to Surface Water (See EPA Form 2C)			1-U / 4-A
	006	Sedimentation and Discharge to Surface Water			1-U / 4-A	
	022	Sedimentation and Discharge to Surface Water			1-U / 4-A	
	023	Sedimentation and Discharge to Surface Water			1-U / 4-A	
	024	Sedimentation and Discharge to Surface Water			1-U / 4-A	
	025	Discharge to Surface Water			4-A	

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SECTION 5. NON STORMWATER DISCHARGES (40 CFR 122.26(C)(1)(I)(C))

Non-Stormwater Discharges	<u>5.1</u>	Provide the following certification. (See instructions to determine the appropriate person to sign the application.) <i>I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges. Moreover, I certify that the outfalls identified as having non-stormwater discharges are described in either an accompanying NPDES Form 2C, 2D, or 2E application.</i>			
		Name (print or type first and last name)	Official title		
		Angela Aten	Senior Environmental Manager		
		Signature <i>Angela Aten</i>	Date signed 7/14/2025		
	<u>5.2</u>	Provide the testing information requested in the table below.			
		Outfall Number	Description of Testing Method Used	Date(s) of Testing	Onsite Drainage Points Directly Observed During Test
		005	General Knowledge / Dry Weather Visual Observations		
		006	General Knowledge / Dry Weather Visual Observations		
		022	General Knowledge / Dry Weather Visual Observations		
		023	General Knowledge / Dry Weather Visual Observations		
	024	General Knowledge / Dry Weather Visual Observations			
	025	General Knowledge / Dry Weather Visual Observations			

SECTION 6. SIGNIFICANT LEAKS OR SPILLS (40 CFR 122.26(C)(1)(I)(D))

Significant Leaks or Spills	<u>6.1</u>	Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years. None

SECTION 7. DISCHARGE INFORMATION (40 CFR 122.26(C)(1)(I)(E))

Discharge Information	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.	
	<u>7.1</u>	Is this a new source or new discharge?
	☐ Yes → See instructions regarding submission of estimated data.	☒ No → See instructions regarding submission of actual data.
	Tables A, B, C, and D	
	<u>7.2</u>	Have you completed Table A for each outfall?
	☒ Yes	

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson	OMB No. 2040-0004 Expires 07/31/2026
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Discharge Information Continued	7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? ☒ Yes ☐ No → SKIP to Item 7.5.
	7.4	Have you completed Table B by providing quantitative data for those pollutants that are (1) limited either directly or indirectly in an ELG and/or (2) subject to effluent limitations in an NPDES permit for the facility's process wastewater? ☒ Yes
	7.5	Do you know or have reason to believe any pollutants in Exhibit 2F-2 are present in the discharge? ☒ Yes ☐ No → SKIP to Item 7.7.
	7.6	Have you listed all pollutants in Exhibit 2F-2 that you know or have reason to believe are present in the discharge and provided quantitative data or an explanation for those pollutants in Table C? ☒ Yes
	7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions? ☐ Yes → SKIP to Item 7.18. ☒ No
	7.8	Do you know or have reason to believe any pollutants in Exhibit 2F-3 are present in the discharge? ☐ Yes ☒ No → SKIP to Item 7.10.
	7.9	Have you listed all pollutants in Exhibit 2F-3 that you know or have reason to believe are present in the discharge in Table C? ☐ Yes
	7.10	Do you expect any of the pollutants in Exhibit 2F-3 to be discharged in concentrations of 10 ppb or greater? ☐ Yes ☒ No → SKIP to Item 7.12.
	7.11	Have you provided quantitative data in Table C for those pollutants in Exhibit 2F-3 that you expect to be discharged in concentrations of 10 ppb or greater? ☐ Yes
	7.12	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater? ☐ Yes ☒ No → SKIP to Item 7.14.
	7.13	Have you provided quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater? ☐ Yes
	7.14	Have you provided quantitative data or an explanation in Table C for pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the pollutants identified in Item 7.12)? ☒ Yes
7.15	Do you know or have reason to believe any pollutants in Exhibit 2F-4 are present in the discharge? ☐ Yes ☒ No → SKIP to Item 7.17.	

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson
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Discharge Information Continued	7.16	Have you listed pollutants in Exhibit 2F-4 that you know or believe to be present in the discharge and provided an explanation in Table C?	
		☐ Yes	
	7.17	Have you provided information for the storm event(s) sampled in Table D?	
		☒ Yes	
	Used or Manufactured Toxics		
	7.18	Is any pollutant listed on Exhibits 2F-2 through 2F-4 a substance or a component of a substance used or manufactured as an intermediate or final product or byproduct?	
	☐ Yes ☒ No → SKIP to Section 8.		
7.19	List the pollutants below, including TCDD if applicable. Attach additional sheets, if necessary.		
	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

SECTION 8. BIOLOGICAL TOXICITY TESTING DATA (40 CFR 122.21(G)(11))

Biological Toxicity Testing Data	8.1	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last three years?		
		☒ Yes ☐ No → SKIP to Section 9.		
	8.2	Identify the tests and their purposes below.		
		Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?
		See Form 2C Section 9.2	Permit Requirement	☒ Yes ☐ No
				☐ Yes ☐ No

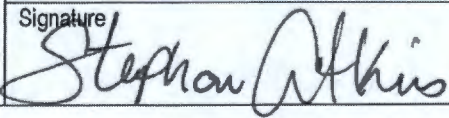
SECTION 9. CONTRACT ANALYSIS INFORMATION (40 CFR 122.21(G)(12))

Contract Analysis Information	9.1	Were any of the analyses reported in Section 7 (in Tables A through C) performed by a contract laboratory or consulting firm?		
		☒ Yes ☐ No → SKIP to Section 10.		
	9.2	Provide information for each contract laboratory or consulting firm below.		
			Laboratory Number 1	Laboratory Number 2
		Name of laboratory/firm	Southern Environmental Testing	
		Laboratory address	2919 Fairgrounds Road SW Decatur, AL 35603	
		Phone number	(256) 280-2567	

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson
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SECTION 10. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))

Checklist and Certification Statement	<u>10.1</u>	In Column 1 below, mark the sections of Form 2F that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.	
		Column 1	Column 2
		☒ Section 1	☐ w/ attachments (e.g., responses for additional outfalls)
		☒ Section 2	☐ w/ attachments
		☒ Section 3	☐ w/ site drainage map
		☒ Section 4	☐ w/ attachments
		☒ Section 5	☐ w/ attachments
		☒ Section 6	☐ w/ attachments
		☒ Section 7	☒ Table A ☐ w/ small business exemption request ☒ Table B ☐ w/ analytical results as an attachment ☒ Table C ☐ Table D
		☒ Section 8	☐ w/ attachments
		☒ Section 9	☐ w/ attachments (e.g., responses for additional contact laboratories or firms)
		☒ Section 10	
	<u>10.2</u>	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)	
	Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>		
Name (print or type first and last name)		Official title	
Stephan Atkins		Interim General Manager	
Signature 		Date signed 7-14-25	

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson Mill	Outfall Number 006 (From DSN005 Analyses)
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OMB No. 2040-0004
Expires 07/31/2026

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(C)(1)(I)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter		Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	<5.00 mg/L		<5.00 mg/L		7	
2.	Biochemical oxygen demand (BOD ₅)	4.0 mg/L	N/A	1.9 mg/L	N/A	13	
3.	Chemical oxygen demand (COD)	<10.0 mg/L	N/A	<10.0 mg/L	N/A	1	
4.	Total suspended solids (TSS)	24 mg/L	N/A	14 mg/L	N/A	13	
5.	Total phosphorus	0.12 mg/L	N/A	0.12 mg/L	N/A	1	
6.	Total Kjeldahl nitrogen (TKN)	1.50 mg/L	N/A	1.50 mg/L	N/A	1	
7.	Total nitrogen (as N)	<2.10 mg/L	N/A	<2.10 mg/L	N/A	1	
8.	pH (minimum)	6.30		7.13		13	
	pH (maximum)	8.10		7.13		13	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility name WestRock CP, LLC - Stevenson Mill	Outfall Number 006 (From DSN005 Analyses)
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OMB No. 2040-0004
Expires 07/31/2026

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(C)(1)(I)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)

Provide a description of the method of flow measurement or estimate.

Flows are determined using Rational Method.

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson Mill	Outfall Number 022
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OMB No. 2040-0004
Expires 07/31/2026

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(C)(1)(i)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter		Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	<5.00 mg/L		<5.00 mg/L		7	
2.	Biochemical oxygen demand (BOD ₅)	4.0 mg/L	N/A	1.5 mg/L	N/A	6	
3.	Chemical oxygen demand (COD)	30.0 mg/L	N/A	30.0 mg/L	N/A	1	
4.	Total suspended solids (TSS)	26 mg/L	N/A	15 mg/L	N/A	6	
5.	Total phosphorus	0.050 mg/L	N/A	0.050 mg/L	N/A	1	
6.	Total Kjeldahl nitrogen (TKN)	1.93 mg/L	N/A	1.93 mg/L	N/A	1	
7.	Total nitrogen (as N)	<2.53 mg/L	N/A	<2.53 mg/L	N/A	1	
8.	pH (minimum)	6.60		7.20		6	
	pH (maximum)	8.03		7.20		6	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility name WestRock CP, LLC - Stevenson Mill	Outfall Number 022
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Expires 07/31/2026

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(C)(1)(I)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)

Provide a description of the method of flow measurement or estimate.

Flows are determined using Rational Method.

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson Mill	Outfall Number 023
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OMB No. 2040-0004
Expires 07/31/2026

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(C)(1)(I)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter		Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	<5.00 mg/L		<5.00 mg/L		7	
2.	Biochemical oxygen demand (BOD ₅)	3.0 mg/L	N/A	1.2 mg/L	N/A	6	
3.	Chemical oxygen demand (COD)	28.0 mg/L	N/A	28.0 mg/L	N/A	1	
4.	Total suspended solids (TSS)	28 mg/L	N/A	13 mg/L	N/A	6	
5.	Total phosphorus	0.070 mg/L	N/A	0.070 mg/L	N/A	1	
6.	Total Kjeldahl nitrogen (TKN)	1.40 mg/L	N/A	1.40 mg/L	N/A	1	
7.	Total nitrogen (as N)	<2.00 mg/L	N/A	<2.00 mg/L	N/A	1	
8.	pH (minimum)	6.40		6.66		6	
	pH (maximum)	6.94		6.66		6	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility name WestRock CP, LLC - Stevenson Mill	Outfall Number 023
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OMB No. 2040-0004
Expires 07/31/2026

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(C)(1)(I)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)

Provide a description of the method of flow measurement or estimate.

Flows are determined using Rational Method.

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson Mill	Outfall Number 024 (From DSN025 Analyses)
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OMB No. 2040-0004
Expires 07/31/2026

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(C)(1)(I)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1. Oil and grease	<5.00 mg/L		<5.00 mg/L		6	
2. Biochemical oxygen demand (BOD ₅)	4.0 mg/L	N/A	2.6 mg/L	N/A	5	
3. Chemical oxygen demand (COD)	22.0 mg/L	N/A	22.0 mg/L	N/A	1	
4. Total suspended solids (TSS)	39 mg/L	N/A	23 mg/L	N/A	5	
5. Total phosphorus	0.090 mg/L	N/A	0.090 mg/L	N/A	1	
6. Total Kjeldahl nitrogen (TKN)	1.48 mg/L	N/A	1.48 mg/L	N/A	1	
7. Total nitrogen (as N)	6.30 mg/L	N/A	6.30 mg/L	N/A	1	
8. pH (minimum)	6.10		7.22		5	
	8.20		7.22		5	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(C)(1)(I)(E)(4) AND 40 CFR 122.21(G)(7)(VI)(B) AND (VII))¹

List each pollutant shown in Exhibits 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

[illegible]

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility name WestRock CP, LLC - Stevenson Mill	Outfall Number 024 (From DSN025 Analyses)
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OMB No. 2040-0004
Expires 07/31/2026

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(C)(1)(I)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)

Provide a description of the method of flow measurement or estimate.

Flows are determined using Rational Method.

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility Name WestRock CP, LLC - Stevenson Mill	Outfall Number 025
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OMB No. 2040-0004
Expires 07/31/2026

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(C)(1)(I)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter		Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	<5.00 mg/L		<5.00 mg/L		6	
2.	Biochemical oxygen demand (BOD ₅)	4.0 mg/L	N/A	2.6 mg/L	N/A	5	
3.	Chemical oxygen demand (COD)	22.0 mg/L	N/A	22.0 mg/L	N/A	1	
4.	Total suspended solids (TSS)	39 mg/L	N/A	23 mg/L	N/A	5	
5.	Total phosphorus	0.090 mg/L	N/A	0.090 mg/L	N/A	1	
6.	Total Kjeldahl nitrogen (TKN)	1.48 mg/L	N/A	1.48 mg/L	N/A	1	
7.	Total nitrogen (as N)	6.30 mg/L	N/A	6.30 mg/L	N/A	1	
8.	pH (minimum)	6.10		7.22		5	
	pH (maximum)	8.20		7.22		5	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number 110067613185	NPDES Permit Number AL0022314	Facility name WestRock CP, LLC - Stevenson Mill	Outfall Number 025
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OMB No. 2040-0004
Expires 07/31/2026

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(C)(1)(I)(E)(6))

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Provide a description of the method of flow measurement or estimate.

Flows are determined using Rational Method.



Form 2F Site Drainage Map – WestRock CP, LLC
Stevenson Mill – NPDES Permit No. AL0022314

Supplement to EPA Form 2F Items 4.2 and 4.3
WestRock CP, LLC – Stevenson Mill (NPDES Permit No. AL0022314)

Discharge Outfall	Internal Outfall	Location	Area of Drainage	Areas Drained	Significant Materials Potentially Exposed to Storm Water	Control Measures
DSN 006	N/A	N 34° 51' 38" W 85° 47' 42"	40.1 acres	Landfill Farmland	Sludge, Ash, Oil/Fuel, and Landfill Leachate	Silt Fence / Hay Bales
DSN 022	N/A	N 34° 51' 22" W 85° 46' 51"	20.0 acres	Sanitary WWTP Laydown Yard Farmland	Sludge, Sanitary Wastewater, Old Equipment, Oil/Fuel, and Wood Debris/Bark	Rip Rap Dam
DSN 023	003	N 34° 51' 49" W 85° 46' 42"	34.8 acres	Woodyard Wood-Fired Boilers Pulp Mill	Chips, Bark, Ash, Paper Rejects, Sludge, Process Water, Waste Paper, Whitewater, Paper Stock, and Oil/Fuel	Rip Rap Dam (Note: Bulk Chemicals and Liquids are stored in aboveground storage tanks.)
	004	N 34° 52' 05" W 85° 46' 42"	6.2 acres	Power & Recovery Fire Training Shipping	Spent Pulping and/or Cooking Liquor, Miscellaneous Chemicals, Process Water, Ash, Fire Water, Oil/Fuel, and Waste Paper	
	007	N 34° 51' 46" W 85° 47' 26"	3.6 acres	Chip Pile	Wood Chips, Bark, and Oil/Fuel	
	008	N 34° 51' 49" W 85° 47' 25"	25.3 acres	Chip Pile Mobile Equipment Shop	Wood Chips, Bark, Oil/Fuel, and Machinery	
	009	N 34° 51' 48" W 85° 47' 24"	1.2 acres	OCC Storage	Waste Paper and Oil/Fuel	
	010	N 34° 51' 46" W 85° 47' 22"	1.1 acres	OCC Storage	Waste Paper and Oil/Fuel	
	011	N 34° 51' 44" W 85° 47' 21"	4.8 acres	Woodyard OCC Storage	Bark, Wood Debris, Oil/Fuel, and Waste Paper	
	012	N 34° 51' 43" W 85° 47' 18"	2.0 acres	Woodyard	Bark, Wood Debris, and Oil/Fuel	
	013	N 34° 51' 43" W 85° 47' 15"	2.4 acres	Stacker/Reclaimer	Wood Debris and Oil/Fuel	

Supplement to EPA Form 2F Items 4.2 and 4.3
WestRock CP, LLC – Stevenson Mill (NPDES Permit No. AL0022314)

Discharge Outfall	Internal Outfall	Location	Area of Drainage	Areas Drained	Significant Materials Potentially Exposed to Storm Water	Control Measures
DSN 023 (cont'd)	014	N 34° 52' 07" W 85° 47' 13"	9.5 acres	Parking Lots	Sediment and Oil/Fuel	Rip Rap Dam (Note: Bulk Chemicals and Liquids are stored in aboveground storage tanks.)
	015	N 34° 52' 06" W 85° 47' 10"	1.5 acres	Parking Lot	Sediment and Oil/Fuel	
	016	N 34° 52' 06" W 85° 47' 09"	2.9 acres	Shipping Paper Machines	Sediment and Oil/Fuel	
	017	N 34° 52' 07" W 85° 47' 07"	2.9 acres	Shipping	Sediment and Oil/Fuel	
	018	N 34° 52' 08" W 85° 47' 02"	20.0 acres	Trailer Yard	Sediment and Oil/Fuel	
	019	N 34° 52' 03" W 85° 47' 02"	3.6 acres	Shipping	Sediment, Oil/Fuel, and Rail Car Shower	
	020	N 34° 52' 04" W 85° 47' 02"	3.9 acres	Power & Recovery	Spent Pulping and/or Cooking Liquor, Miscellaneous Chemicals, Oil/Fuel, and Process Water	
	021	N 34° 52' 02" W 85° 46' 60"	2.6 acres	Power & Recovery	Spent Pulping and/or Cooking Liquor	
	023	N 34° 52' 5" W 85° 46' 20"	145 acres (total)	Laydown Yard Farmland	Wood Debris, Sludge, Old Equipment, and Oil/Fuel	
DSN 024	N/A	N 34° 51' 50" W 85° 48' 9"	30 acres	Wet Yard	Wood Debris and Oil/Fuel	Sediment Pond
DSN 025	N/A	N 34° 51' 42" W 85° 48' 24"	5 acres	Area West of Wet Yard	Wood Debris and Oil/Fuel	N/A



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NALCON® 10WB

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NALCON® 10WB

Other means of Identification : formerly BIOCHEK 10WB

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1801 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 02/09/2015

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 3

Acute toxicity (Inhalation) : Category 4

Acute toxicity (Dermal) : Category 4

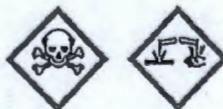
Skin corrosion : Category 1A

Serious eye damage/eye irritation : Category 1

Skin sensitization : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Toxic if swallowed.
Harmful in contact with skin or if inhaled
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all

SAFETY DATA SHEET

NALCON® 10WB

contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
Methylenebis(2-chloroethyl)amine	6317-18-6	10
Propylene Glycol	57-55-6	1 - 5

Section: 4. FIRST AID MEASURES

In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
In case of skin contact	: Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	: Remove to fresh air. Treat symptomatically. Get medical attention.
Protection of first-aiders	: In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
Notes to physician	: Treat symptomatically.
Most important symptoms and effects, both acute and delayed	: See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: None known.
Specific hazards during	: May evolve oxides of carbon (COx) under fire conditions.

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- firefighting : May evolve oxides of nitrogen (NOx) and sulfur (SOx) under fire conditions.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus
- Special protective equipment for firefighters : In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Ventilate spill area if possible. Do not touch spilled material. Stop or reduce any leaks if it is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Notify appropriate government, occupational health and safety and environmental authorities.
- Environmental precautions : This product is toxic to fish and other water organisms. Do not discharge directly into lakes, ponds, streams, waterways or public water supplies.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Avoid generating aerosols and mists. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available.
- Conditions for safe storage : Store the containers tightly closed. Store separately from oxidizers. Store in suitable labeled containers.
- Suitable material : Keep in properly labelled containers.
- Unsuitable material : not determined

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
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Propylene Glycol	57-55-6	TWA	10 mg/m3	WEEL
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Engineering measures : Effective exhaust ventilation system Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Viscous liquid

Colour : orange

Odour : Characteristic

Flash point : > 93.3 °C

pH : 2.0 - 4.0, 100 %
(25 °C) Method: ASTM E 70

Odour Threshold : no data available

Melting point/freezing point : no data available

Initial boiling point and boiling range : 100 °C

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : similar to water

Relative vapour density : no data available

Relative density : 1.0 - 1.1 (25 °C) ASTM D-1298

Density : 8.3 - 9.2 lb/gal

Water solubility : dispersible

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Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition temperature	: no data available
Viscosity, dynamic	: 150 mPa.s (20 °C) 650 - 1,500 mPa.s (25 °C)
Viscosity, kinematic	: no data available
VOC	: 10.5 %

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Extremes of temperature
Incompatible materials	: Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors. Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors. Strong bases Contact with strong alkalies (e.g. ammonia and its solutions, carbonates, sodium hydroxide (caustic), potassium hydroxide, calcium hydroxide (lime), cyanide, sulfide, hypochlorites, chlorites) may generate heat, splattering or boiling and toxic vapors.
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	: Inhalation, Eye contact, Skin contact
Potential Health Effects	
Eyes	: Causes serious eye damage.
Skin	: Harmful in contact with skin. Causes severe skin burns. May cause allergic skin reaction.
Ingestion	: Toxic if swallowed. Causes digestive tract burns.
Inhalation	: Harmful if inhaled. May cause nose, throat, and lung irritation.

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Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Irritation, Corrosion, Allergic reactions

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity : no data available

Acute inhalation toxicity : no data available

Acute dermal toxicity : no data available

Skin corrosion/irritation : Species: Rabbit
Result: 3.8
Method: Draize Test
Test substance: Product

Serious eye damage/eye irritation : Species: rabbit
Result: 110.0
Method: Draize Test
Test substance: Product

Species: rabbit
Result: Extremely irritating (Corrosive)
Test substance: Product

Respiratory or skin sensitization : no data available

Carcinogenicity

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive effects : no data available

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Germ cell mutagenicity : Not mutagenic in Ames Test.

Teratogenicity : no data available

STOT - single exposure : no data available

STOT - repeated exposure : no data available

Aspiration toxicity : no data available

Components

Acute oral toxicity : Propylene Glycol
LD50 rat: 22,000 mg/kg

Components

Acute inhalation toxicity : Propylene Glycol
LC50 rat: > 158.5 mg/l
Exposure time: 4 h

Components

Acute dermal toxicity : Propylene Glycol
LD50 rabbit: > 2,000 mg/kg

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : Toxic to aquatic life.

Product

Toxicity to fish : LC50 *Lepomis macrochirus* (Bluegill sunfish): 2.8 mg/l
Exposure time: 96 hrs
Test substance: Product
Test Type: Static

LC50 *Oncorhynchus mykiss* (rainbow trout): 1.9 mg/l
Exposure time: 96 hrs
Test substance: Product
Test Type: Static

LC50 *Pimephales promelas* (fathead minnow): 6.0 mg/l
Exposure time: 96 hrs
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 *Daphnia magna* (Water flea): 0.48 mg/l
Exposure time: 48 hrs
Test substance: Product
Test Type: Static

Persistence and degradability

The organic portion of this preparation is expected to be readily biodegradable.

Mobility

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The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

- Disposal methods** : Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.
- The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
- Disposal considerations** : METAL CONTAINERS: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. PLASTIC CONTAINERS: Do not reuse empty container. Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
- Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name	: TOXIC LIQUID, ORGANIC, N.O.S.
Technical name(s)	: Methylenebis(1-thiocyanate)

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UN/ID No. : UN 2810
Transport hazard class(es) : 6.1
Packing group : III

Air transport (IATA)

Proper shipping name : TOXIC LIQUID, ORGANIC, N.O.S.
Technical name(s) : Methylenebisithiocyanate
UN/ID No. : UN 2810
Transport hazard class(es) : 6.1
Packing group : III

Sea transport (IMDG/IMO)

Proper shipping name : TOXIC LIQUID, ORGANIC, N.O.S.
Technical name(s) : Methylenebisithiocyanate
UN/ID No. : UN 2810
Transport hazard class(es) : 6.1
Packing group : III

*Marine pollutant : METHYLENE-BIS-THIOCYANATE

*Note: This product is regulated as a Marine Pollutant when shipped by Rail, Highway (in bulk quantities), or Air (if no other hazard class applies), and when shipped by water in all quantities.

Section: 15. REGULATORY INFORMATION

EPA Reg. No. : 1706-200

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

TOXIC SUBSTANCES CONTROL ACT (TSCA)

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

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CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

This product contains substance(s) which are found on the Non-Domestic Substances List (NDSL), or are not in compliance with other Canadian Acts.

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

EUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS Inventories.

JAPAN

This product contains substance(s) which are not in compliance with the Law Regulating the Manufacture and Importation Of Chemical Substances and are not listed on the Existing and New Chemical Substances list (ENCS).

KOREA

This product contains substance(s) which are not in compliance with the Toxic Chemical Control Law (TCCL) and may require additional review.

NEW ZEALAND

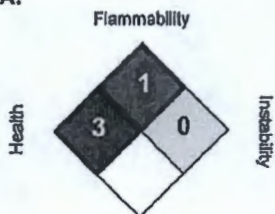
All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

PHILIPPINES

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 02/09/2015
Version Number : 1.0
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

SAFETY DATA SHEET

NALCON® 10WB

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

For additional copies of an MSDS visit www.nalco.com and request access.

SAFETY DATA SHEET

ACTI-BROM™ 1318

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ACTI-BROM™ 1318

Other means of identification : Not applicable.

Recommended use : BIOCIDES

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630) 305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 10/04/2021

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Eye irritation : Category 2B

GHS Label element

Signal Word : Warning

Hazard Statements : Causes eye irritation.

Precautionary Statements : **Prevention:**
Wash skin thoroughly after handling.
Response:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
Sodium Bromide	7647-15-6	43

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse with plenty of water. Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and plenty of water. Get medical attention if symptoms occur.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

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ACTI-BROM™ 1318

- If inhaled : Get medical attention if symptoms occur.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : May evolve hydrogen bromide and bromine under fire conditions.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Keep people away from and upwind of spill/leak. Ventilate spill area if possible. Ensure clean-up is conducted by trained personnel only. Do not touch spilled material. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Notify appropriate government, occupational health and safety and environmental authorities.
- Environmental precautions : This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters, unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

Advice on safe handling : Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Do not breathe vapors/gases/dust. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled.

Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers. Protect product from freezing.

Suitable material : Shipping and long term storage compatibility with construction materials can vary; we therefore recommend that compatibility is tested prior to use. Keep in properly labelled containers.

Unsuitable material : not determined

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Eye protection : Safety glasses

Hand protection : Wear protective gloves.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Wear suitable protective clothing.

Respiratory protection : No personal respiratory protective equipment normally required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

The Personal Protective Equipment (PPE) recommendations provided above have been made in good faith based on typical expected conditions of use. PPE selection should always be completed in conjunction with a proper risk assessment and in accordance with a PPE management program.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

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ACTI-BROM™ 1318

Appearance	: Liquid
Colour	: colourless
Odour	: odourless
Flash point	: does not flash
pH	: 7.9,(100 %), Method: ASTM E 70
Odour Threshold	: no data available
Melting point/freezing point	: Freezing Point: -14 °C, ASTM D-1177
Initial boiling point and boiling range	: 103.5 °C, Method: ASTM D 86
Evaporation rate	: no data available
Flammability (solid, gas)	: Not applicable.
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: 5.6 mm Hg, (20 °C), ASTM D 323,
Relative vapour density	: no data available
Relative density	: 1.45, (25 °C), ASTM D-1298
Density	: 12.1 lb/gal
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 5 mPa.s (20 °C)
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: no data available

Section: 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Freezing temperatures.
Incompatible materials	: Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.

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Hazardous decomposition products : In case of fire, hazardous decomposition products may be produced such as:
Carbon oxides
nitrogen oxides (NO_x)
Sulphur oxides
Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes : Causes eye irritation.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : Redness, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Acute inhalation toxicity : no data available

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Skin corrosion/irritation : Species: Rabbit
Result: 0.0
Method: Draize Test
Test substance: Similar Product

Serious eye damage/eye irritation : Species: rabbit
Result: 16.0
Method: Draize Test
Test substance: Similar Product

Respiratory or skin sensitization : no data available

Carcinogenicity : no data available

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Reproductive effects : no data available
Germ cell mutagenicity : no data available
Teratogenicity : no data available
STOT - single exposure : no data available
STOT - repeated exposure : no data available
Aspiration toxicity : no data available

Section: 12. ECOLOGICAL INFORMATION

Toxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : LC50 *Lepomis macrochirus* (Bluegill sunfish): > 1,000 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

LC50 *Oncorhynchus mykiss* (rainbow trout): > 1,000 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

LC50 *Pimephales promelas* (fathead minnow): > 5,000 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC *Pimephales promelas* (fathead minnow): 5,000 mg/l
Exposure time: 96 hrs
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 *Ceriodaphnia dubia*: > 5,000 mg/l
Exposure time: 48 hrs
Test substance: Product

NOEC *Ceriodaphnia dubia*: 5,000 mg/l
Exposure time: 48 hrs
Test substance: Product

Persistence and degradability

Greater than 95% of this product consists of inorganic substances for which a biodegradation value is not applicable.

Biochemical Oxygen Demand (BOD): This material is an oxidizing biocide and is not expected to persist in the environment.

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is

SAFETY DATA SHEET

ACTI-BROM™ 1318

intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

Disposal methods : As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.
Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : DO NOT REUSE EMPTY CONTAINER. Triple rinse the container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate. Burn only if allowed by state and local authorities. If burned, stay out of smoke.
Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Air transport (IATA)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Sea transport (IMDG/IMO)

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ACTI-BROM™ 1318

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Section: 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.
No substances are subject to TSCA 12(b) export notification requirements.

EPA Reg. No. : 83451-18-1706

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This product does not contain a RQ substance, or this product contains a substance with a RQ, however the calculated RQ exceeds the reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

Australia. Australian Industrial Chemicals Introduction Scheme (AICIS)

All substances in this product comply with the Australian Industrial Chemicals Introduction Scheme (AICIS)

Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

SAFETY DATA SHEET

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All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

China Inventory of Existing Chemical Substances

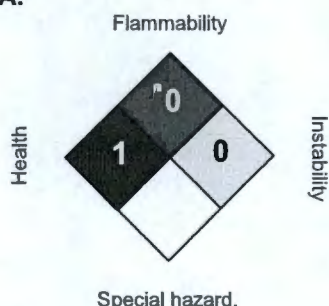
All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

Taiwan Chemical Substance Inventory

On the inventory, or in compliance with the inventory.

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 10/04/2021
Version Number : 1.2
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.

SAFETY DATA SHEET

3D TRASAR™ 3DT487

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 3D TRASAR™ 3DT487

Other means of identification : Not applicable.

Recommended use : COOLING WATER TREATMENT

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 03/23/2018

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Corrosive to metals : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Warning

Hazard Statements : May be corrosive to metals.

Precautionary Statements : **Prevention:**
Keep only in original container.
Response:
Absorb spillage to prevent material damage.
Storage:
Store in corrosive resistant stainless steel container with a resistant inner liner.

Other hazards : Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
Phosphoric Acid	7664-38-2	5 - 10

Section: 4. FIRST AID MEASURES

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3D TRASAR™ 3DT487

- In case of eye contact : Rinse with plenty of water. Get medical attention if symptoms occur.
- In case of skin contact : Wash off with soap and plenty of water. Get medical attention if symptoms occur.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

SAFETY DATA SHEET

3D TRASAR™ 3DT487

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Wash hands thoroughly after handling. Use only with adequate ventilation. Do not mix with bleach or other chlorinated products – will cause chlorine gas.
- Conditions for safe storage : Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : Keep in properly labelled containers.
- Unsuitable material : not determined

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Phosphoric Acid	7664-38-2	TWA	1 mg/m3	ACGIH
		STEL	3 mg/m3	ACGIH
		TWA	1 mg/m3	NIOSH REL
		STEL	3 mg/m3	NIOSH REL
		TWA	1 mg/m3	OSHA Z1

- Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

- Eye protection : Safety glasses
- Hand protection : Wear protective gloves.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin protection : Wear suitable protective clothing.
- Respiratory protection : No personal respiratory protective equipment normally required.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : yellow
- Odour : None
- Flash point : 102.8 °C, Method: ASTM D 92, Does not sustain combustion.
- pH : 1.3 - 2.0

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3D TRASAR™ 3DT487

Odour Threshold	: no data available
Melting point/freezing point	: Melting point/freezing point: -7.4 °C
Initial boiling point and boiling range	: 97.8 °C
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: 1.223, (15.6 °C),
Density	: no data available
Water solubility	: Complete
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 16.5 mPa.s (23 °C)
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: no data available

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	: None known.
Incompatible materials	: Strong bases
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	: Inhalation, Eye contact, Skin contact
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SAFETY DATA SHEET

3D TRASAR™ 3DT487

Potential Health Effects

Eyes : Health injuries are not known or expected under normal use.
Skin : Health injuries are not known or expected under normal use.
Ingestion : Health injuries are not known or expected under normal use.
Inhalation : Health injuries are not known or expected under normal use.
Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : No symptoms known or expected.
Skin contact : No symptoms known or expected.
Ingestion : No symptoms known or expected.
Inhalation : No symptoms known or expected.

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Acute inhalation toxicity : Acute toxicity estimate: > 10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
Skin corrosion/irritation : Species: rabbit
Result: 0.0
GLP: yes
Test substance: Product
Serious eye damage/eye irritation : Species: rabbit
Exposure time: 72 hrs
Result: 0.0
Method: Draize Test
GLP: yes
Test substance: Product
Respiratory or skin sensitization : no data available
Carcinogenicity : no data available
Reproductive effects : no data available
Germ cell mutagenicity : no data available
Teratogenicity : no data available
STOT - single exposure : no data available
STOT - repeated exposure : no data available

SAFETY DATA SHEET

3D TRASAR™ 3DT487

Aspiration toxicity : no data available

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : LC50 Fathead Minnow: 7,175 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Fathead Minnow: 3,600 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Rainbow Trout: > 10,000 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Rainbow Trout: 6,000 mg/l
Exposure time: 96 hrs
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : EC50 Ceriodaphnia dubia: 1,103 mg/l
Exposure time: 48 hrs
Test substance: Product

LC50 Ceriodaphnia dubia: 1,350 mg/l
Exposure time: 48 hrs
Test substance: Product

NOEC Ceriodaphnia dubia: 313 mg/l
Exposure time: 48 hrs
Test substance: Product
Test Type: Immobilization

NOEC Ceriodaphnia dubia: 625 mg/l
Exposure time: 48 hrs
Test substance: Product

Components

Toxicity to algae : Phosphoric Acid
EC50 Desmodesmus subspicatus (green algae): > 100 mg/l
Exposure time: 72 h

Persistence and degradability

Total Organic Carbon (TOC) : 120,000 mg/l

Chemical Oxygen Demand (COD): 300,000 mg/l

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Biochemical Oxygen Demand (BOD):

Incubation Period	Value
5 d	400 mg/l

Test Descriptor

Mobility

no data available

Bioaccumulative potential

no data available

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name	: PHOSPHORIC ACID SOLUTION
Technical name(s)	:
UN/ID No.	: UN 1805
Transport hazard class(es)	: 8
Packing group	: III
Reportable Quantity (per package)	: 54,007 lbs
RQ Component	: Phosphoric Acid

Air transport (IATA)

Proper shipping name	: PHOSPHORIC ACID SOLUTION
Technical name(s)	:
UN/ID No.	: UN 1805
Transport hazard class(es)	: 8
Packing group	: III
Reportable Quantity (per package)	: 54,007 lbs
RQ Component	: Phosphoric Acid

Sea transport (IMDG/IMO)

SAFETY DATA SHEET

3D TRASAR™ 3DT487

Proper shipping name : PHOSPHORIC ACID SOLUTION
Technical name(s) :
UN/ID No. : UN 1805
Transport hazard class(es) : 8
Packing group : III

Section: 15. REGULATORY INFORMATION

TSCA list : Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Phosphoric Acid	7664-38-2	5000	54007

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
Hydrogen Peroxide 7722-84-1

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

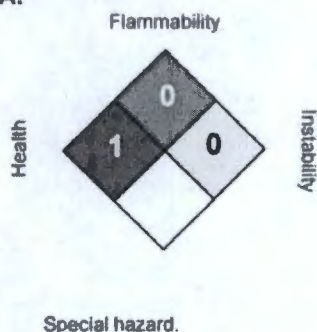
SAFETY DATA SHEET

3D TRASAR™ 3DT487

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 03/23/2018
Version Number : 1.9
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.

SAFETY DATA SHEET

NALCO® 7330

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NALCO® 7330

Other means of identification : Not applicable.

Recommended use : BIOCIDES

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 01/22/2019

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Inhalation) : Category 4
Skin corrosion : Category 1B
Serious eye damage : Category 1
Skin sensitization : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Harmful if inhaled.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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NALCO® 7330

Immediately call a POISON CENTER or doctor/ physician. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Magnesium Nitrate	10377-60-3	1 - 5
5-Chloro-2-Methyl-4-Isothiazolin-3-one	26172-55-4	1.1
2-Methyl-4-Isothiazolin-3-one	2682-20-4	0.4

Section: 4. FIRST AID MEASURES

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.

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- Hazardous combustion products : Carbon oxides nitrogen oxides (NOx) Hydrogen chloride metal oxides
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. DEACTIVATION SOLUTION - prepare a fresh solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water (i.e. add 50 grams of sodium bicarbonate per 1 liter of household bleach, seal container then shake well for 1 minute) away from the immediate area of spill. Prepare 10 times the estimated volume of the residual spill. The materials and equipment for preparing solutions should be kept available for use in areas where spills may occur.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.
- Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: HDPE (high density polyethylene), PTFE, Perfluoroelastomer, Polyvinylidene difluoride, Polypropylene, CPVC (rigid), Plexiglass
- Unsuitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Carbon steel, Stainless Steel 304, Stainless Steel 316L, Nitrile, Brass, Nylon, Neoprene, EPDM, Fluoroelastomer, Plasite 7122

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

SAFETY DATA SHEET

NALCO® 7330

Contains no substances with occupational exposure limit values.

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear the following personal protective equipment:
butyl-rubber
Nitrile rubber
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid
Colour : colourless
Odour : pungent
Flash point : Not applicable.
pH : 2 - 5
Odour Threshold : no data available
Melting point/freezing point : -4 °C, ASTM D-1177
Initial boiling point and boiling range : 100 °C, Method: ASTM D 86
Evaporation rate : no data available
Flammability (solid, gas) : no data available
Upper explosion limit : no data available
Lower explosion limit : no data available
Vapour pressure : similar to water
Relative vapour density : no data available
Relative density : 1.026, (25 °C),
Density : 8.5 lb/gal

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NALCO® 7330

Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 3 mPa.s (25 °C)
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: 0 %, EPA Method 24

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.
Hazardous decomposition products	: In case of fire, hazardous decomposition products may be produced such as: Carbon oxides nitrogen oxides (NOx) metal oxides Hydrogen chloride

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns. May cause allergic skin reaction.
Ingestion	: Causes digestive tract burns.
Inhalation	: Harmful if inhaled. May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

SAFETY DATA SHEET

NALCO® 7330

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Irritation, Corrosion, Allergic reactions
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity	: Acute toxicity estimate: > 5,000 mg/kg
Acute inhalation toxicity	: LC50 rat: 13.7 mg/l Exposure time: 4 hrs Test atmosphere: vapour Test substance: Product LC50: 13.7 mg/l Test atmosphere: vapour Acute toxicity estimate: 20.39 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	: Acute toxicity estimate: > 5,000 mg/kg
Skin corrosion/irritation	: no data available
Serious eye damage/eye irritation	: no data available
Respiratory or skin sensitization	: no data available
Carcinogenicity	: no data available
Reproductive effects	: no data available
Germ cell mutagenicity	: no data available
Teratogenicity	: no data available
STOT - single exposure	: no data available
STOT - repeated exposure	: no data available
Aspiration toxicity	: no data available

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects	: Very toxic to aquatic life.
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Product

Toxicity to fish	: LC50 Cyprinodon variegatus (sheepshead minnow): 32.000 mg/l Exposure time: 96 hrs Test substance: Product
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SAFETY DATA SHEET

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LC50 Pimephales promelas (fathead minnow): 8 mg/l
Exposure time: 144 hrs
Test substance: Product (estimated)

LC50 Lepomis macrochirus (Bluegill sunfish): 18.67 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Rainbow Trout: 12.67 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Inland Silverside: 16.62 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Cyprinodon variegatus (sheepshead minnow): 0.3 mg/l
Exposure time: 96 hrs
Test substance: Active Substance

NOEC Cyprinodon variegatus (sheepshead minnow): 18.000 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Inland Silverside: 12.5 mg/l
Exposure time: 96 hrs
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Mysid Shrimp (Mysidopsis bahia): 18.000 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Ceriodaphnia dubia: 13 mg/l
Exposure time: 48 hrs
Test substance: Product

LC50 Daphnia magna (Water flea): 8.7 - 12 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

LC50 Blue Mussel: 865 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

LC50 American Oyster: 1,730 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

NOEC Mysid Shrimp (Mysidopsis bahia): < 10 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Ceriodaphnia dubia: 10 mg/l
Exposure time: 48 hrs

SAFETY DATA SHEET

NALCO® 7330

an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : 5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II

Air transport (IATA)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : 5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II

Sea transport (IMDG/IMO)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : 5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II

*Marine pollutant : 5-Chloro-2-Methyl-4-Isothiazolin-3-one

* Note: This product is regulated as a Marine Pollutant when shipped by Rail or Highway (in bulk quantities), and when shipped by water in all quantities.

Section: 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements: 5-Chloro-2-Methyl-4-Isothiazolin-3-one

EPA Reg. No. : 1706-153

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This product does not contain a RQ substance, or this product contains a substance with a RQ, however the calculated RQ exceeds the reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

SAFETY DATA SHEET

NALCO® 7330

This material does not contain any components with a section 304 EHS RQ.

- SARA 311/312 Hazards** : Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitisation
- SARA 302** : This material does not contain any components with a section 302 EHS TPQ.
- SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

Australia. Industrial Chemical (Notification and Assessment) Act

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

Canadian Domestic Substances List (DSL)

Substances regulated under the Pest Control Products Act are exempt from CEPA New Substance Notification requirements.

Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

China Inventory of Existing Chemical Substances

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

Taiwan Chemical Substance Inventory

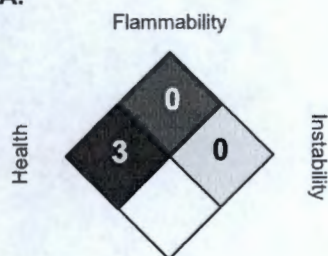
All substances in this product comply with the Taiwan Existing Chemical Substances Inventory (ECSt).

Section: 16. OTHER INFORMATION

SAFETY DATA SHEET

NALCO® 7330

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 01/22/2019
Version Number : 1.6
Prepared By : Regulatory Affairs

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SAFETY DATA SHEET

NALCON™ 7647

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NALCON™ 7647

Other means of identification : Not applicable.

Recommended use : PAPERMILL SLIMICIDE

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 01/22/2019

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Inhalation) : Category 4
Skin corrosion : Category 1B
Serious eye damage : Category 1
Skin sensitization : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Harmful if inhaled.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SAFETY DATA SHEET

NALCON™ 7647

Immediately call a POISON CENTER or doctor/ physician. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Magnesium Nitrate	10377-60-3	1 - 5
5-Chloro-2-Methyl-4-Isothiazolin-3-one	26172-55-4	1.1
2-Methyl-4-Isothiazolin-3-one	2682-20-4	0.4

Section: 4. FIRST AID MEASURES

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.

SAFETY DATA SHEET

NALCON™ 7647

- Hazardous combustion products : Carbon oxides nitrogen oxides (NOx) Hydrogen chloride metal oxides
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. DEACTIVATION SOLUTION - prepare a fresh solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water (i.e. add 50 grams of sodium bicarbonate per 1 liter of household bleach, seal container then shake well for 1 minute) away from the immediate area of spill. Prepare 10 times the estimated volume of the residual spill. The materials and equipment for preparing solutions should be kept available for use in areas where spills may occur.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.
- Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: HDPE (high density polyethylene), PTFE, Perfluoroelastomer, Polyvinylidene difluoride, Polypropylene, CPVC (rigid), Plexiglass
- Unsuitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Carbon steel, Stainless Steel 304, Stainless Steel 316L, Nitrile, Brass, Nylon, Neoprene, EPDM, Fluoroelastomer, Plasite 7122

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

SAFETY DATA SHEET

NALCON™ 7647

Contains no substances with occupational exposure limit values.

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear the following personal protective equipment:
butyl-rubber
Nitrile rubber
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid
Colour : colourless
Odour : pungent
Flash point : Not applicable.
pH : 2 - 5
Odour Threshold : no data available
Melting point/freezing point : -4 °C, ASTM D-1177
Initial boiling point and boiling range : 100 °C, Method: ASTM D 86
Evaporation rate : no data available
Flammability (solid, gas) : no data available
Upper explosion limit : no data available
Lower explosion limit : no data available
Vapour pressure : similar to water
Relative vapour density : no data available
Relative density : 1.026, (25 °C),
Density : 8.5 lb/gal

SAFETY DATA SHEET

NALCON™ 7647

Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 3 mPa.s (25 °C)
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: 0 %, EPA Method 24

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.
Hazardous decomposition products	: In case of fire, hazardous decomposition products may be produced such as: Carbon oxides nitrogen oxides (NOx) metal oxides Hydrogen chloride

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns. May cause allergic skin reaction.
Ingestion	: Causes digestive tract burns.
Inhalation	: Harmful if inhaled. May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

SAFETY DATA SHEET

NALCON™ 7647

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Irritation, Corrosion, Allergic reactions
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity	: Acute toxicity estimate: > 5,000 mg/kg
Acute inhalation toxicity	: LC50 rat: 13.7 mg/l Exposure time: 4 hrs Test atmosphere: vapour Test substance: Product LC50: 13.7 mg/l Test atmosphere: vapour Acute toxicity estimate: 20.39 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	: Acute toxicity estimate: > 5,000 mg/kg
Skin corrosion/irritation	: no data available
Serious eye damage/eye irritation	: no data available
Respiratory or skin sensitization	: no data available
Carcinogenicity	: no data available
Reproductive effects	: no data available
Germ cell mutagenicity	: no data available
Teratogenicity	: no data available
STOT - single exposure	: no data available
STOT - repeated exposure	: no data available
Aspiration toxicity	: no data available

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects	: Very toxic to aquatic life.
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Product

Toxicity to fish	: LC50 Cyprinodon variegatus (sheepshead minnow): 32.000 mg/l Exposure time: 96 hrs Test substance: Product
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SAFETY DATA SHEET

NALCON™ 7647

LC50 Pimephales promelas (fathead minnow): 8 mg/l
Exposure time: 144 hrs
Test substance: Product (estimated)

LC50 Lepomis macrochirus (Bluegill sunfish): 18.67 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Rainbow Trout: 12.67 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Inland Silverside: 16.62 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Cyprinodon variegatus (sheepshead minnow): 0.3 mg/l
Exposure time: 96 hrs
Test substance: Active Substance

NOEC Cyprinodon variegatus (sheepshead minnow): 18.000 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Inland Silverside: 12.5 mg/l
Exposure time: 96 hrs
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Mysid Shrimp (Mysidopsis bahia): 18.000 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Ceriodaphnia dubia: 13 mg/l
Exposure time: 48 hrs
Test substance: Product

LC50 Daphnia magna (Water flea): 8.7 - 12 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

LC50 Blue Mussel: 865 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

LC50 American Oyster: 1,730 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

NOEC Mysid Shrimp (Mysidopsis bahia): < 10 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Ceriodaphnia dubia: 10 mg/l
Exposure time: 48 hrs

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Test substance: Product (estimated)

Toxicity to algae : EC50 Marine Algae (*Skeletonema costatum*): 0.003 mg/l
Exposure time: 72 h
Test substance: Active Substance

EC50 Green Algae (*Pseudokirchneriella subcapitata*,
previously *Selenastrum capricornutum*): 0.018 mg/l
Exposure time: 72 h
Test substance: Active Substance

Persistence and degradability

Total Organic Carbon (TOC) : 7,850 mg/l

Chemical Oxygen Demand (COD): 20,000 mg/l

Biochemical Oxygen Demand (BOD):

Incubation Period	Value
	20 mg/l

Test Descriptor

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

no data available

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in

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an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : 5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II

Air transport (IATA)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : 5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II

Sea transport (IMDG/IMO)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : 5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II

*Marine pollutant : 5-Chloro-2-Methyl-4-Isothiazolin-3-one

* Note: This product is regulated as a Marine Pollutant when shipped by Rail or Highway (in bulk quantities), and when shipped by water in all quantities.

Section: 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements: 5-Chloro-2-Methyl-4-Isothiazolin-3-one

EPA Reg. No. : 1706-158

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This product does not contain a RQ substance, or this product contains a substance with a RQ, however the calculated RQ exceeds the reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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This material does not contain any components with a section 304 EHS RQ.

- SARA 311/312 Hazards** : Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitisation
- SARA 302** : This material does not contain any components with a section 302 EHS TPQ.
- SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

Australia. Industrial Chemical (Notification and Assessment) Act

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

Canadian Domestic Substances List (DSL)

Substances regulated under the Pest Control Products Act are exempt from CEPA New Substance Notification requirements.

Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

China Inventory of Existing Chemical Substances

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

Taiwan Chemical Substance Inventory

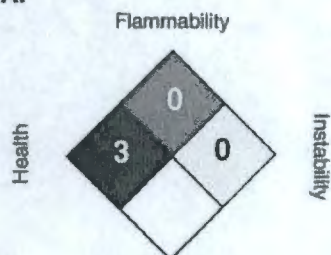
All substances in this product comply with the Taiwan Existing Chemical Substances Inventory (ECSI).

Section: 16. OTHER INFORMATION

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NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 01/22/2019
Version Number : 1.5
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.

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Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NALCON® 7648

Other means of identification : Not applicable.

Recommended use : A LIQUID MICROBIOLOGICAL CONTROL CHEMICAL

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630) 305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 12/23/2020

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 3

Acute toxicity (Dermal) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

GHS Label element

Hazard pictograms :   

Signal Word : Danger

Hazard Statements : Flammable liquid and vapour.
Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.
Fatal if inhaled.

Precautionary Statements : **Prevention:**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/ protective clothing/ eye protection/ face protection. Wear respiratory protection.
Response:
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a

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POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

Storage:

Store in a well-ventilated place. Protect product from freezing.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
n-Alkyl dimethyl benzyl ammonium chlorides	68391-01-5	31.87
Benzyl-Di(C12-C18 Alkyl)-Methyl-Ammonium Chloride	73049-75-9	0.13
Isopropanol	67-63-0	5 - 10

Section: 4. FIRST AID MEASURES

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention immediately.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Foam
Carbon dioxide
Dry powder
Other extinguishing agent suitable for Class B fires
For large fires, use water spray or fog, thoroughly drenching the burning material.
- Unsuitable extinguishing media : None known.

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- Specific hazards during firefighting : Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides
nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Open drum carefully as content may be under pressure. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Do not ingest. Keep away from fire, sparks and heated surfaces. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.
- Conditions for safe storage : Keep away from heat and sources of ignition. Keep in a cool, well-ventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.
- Unsuitable material : not determined

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Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Isopropanol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m ³	NIOSH REL
		STEL	500 ppm 1,225 mg/m ³	NIOSH REL
		TWA	400 ppm 980 mg/m ³	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

The Personal Protective Equipment (PPE) recommendations provided above have been made in good faith based on typical expected conditions of use. PPE selection should always be completed in conjunction with a proper risk assessment and in accordance with a PPE management program.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid
Colour : colourless
Odour : Sweet
Flash point : 39.4 °C
pH : 4.4,(1 %), Method: ASTM E 70
Odour Threshold : no data available

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Melting point/freezing point	: no data available
Initial boiling point and boiling range	: no data available
Evaporation rate	: no data available
Flammability (solid, gas)	: Not applicable.
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: similar to water
Relative vapour density	: no data available
Relative density	: 0.9600 - 1.0100, (25 °C), ASTM D-1298
Density	: 1 g/cm ³ , 8.3 lb/gal
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: 8.92 %, 85.08 g/l, EPA Method 24

Section: 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NO _x) Sulphur oxides Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation, Eye contact, Skin contact

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exposure

Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Harmful in contact with skin. Causes severe skin burns.
Ingestion	: Harmful if swallowed. Causes digestive tract burns.
Inhalation	: Fatal if inhaled. May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity	: LD50 rat: 1,494 mg/kg Test substance: Product LD50 rat: 200 mg/kg
Acute inhalation toxicity	: no data available
Acute dermal toxicity	: LD50 rabbit: 1,545 mg/kg Test substance: Product
Skin corrosion/irritation	: Result: 8.0 Method: Draize Test Test substance: Product
Serious eye damage/eye irritation	: Result: 93.0 Method: Draize Test Test substance: Product
Respiratory or skin sensitization	: no data available
Carcinogenicity	: no data available
Reproductive effects	: no data available
Germ cell mutagenicity	: no data available
Teratogenicity	: no data available
STOT - single exposure	: no data available
STOT - repeated exposure	: no data available
Aspiration toxicity	: no data available

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Components

Acute inhalation toxicity : n-Alkyl dimethyl benzyl ammonium chlorides
LC50 rat: > 0.054 mg/l
Test atmosphere: dust/mist

Isopropanol
LC50 rat: > 30 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Section: 12. ECOLOGICAL INFORMATION

Toxicity

Environmental Effects : Very toxic to aquatic life with long lasting effects.

Product

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout): 2.120 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 *Lepomis macrochirus* (Bluegill sunfish): 0.515 mg/l
Exposure time: 96 hrs
Test substance: Active Substance

LC50 *Oncorhynchus mykiss* (rainbow trout): 0.930 mg/l
Exposure time: 96 hrs
Test substance: Active Substance

LC50 *Cyprinodon variegatus* (sheepshead minnow): 0.86 mg/l
Exposure time: 96 hrs
Test substance: Active Substance

LC50 *Pimephales promelas* (fathead minnow): 0.28 mg/l
Exposure time: 96 hrs
Test substance: Active Substance

LC50 *Pimephales promelas* (fathead minnow): 0.8 mg/l
Exposure time: 96 hrs
Test substance: Active Substance tested with 10 mg/L Humic Acid

LC50 *Pimephales promelas* (fathead minnow): 1.4 mg/l
Exposure time: 96 hrs
Test substance: Active Substance tested with 20 mg/L Humic Acid

LC50 *Oncorhynchus mykiss* (rainbow trout): 1.9 mg/l
Exposure time: 96 h
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 *Daphnia magna* (Water flea): 0.141 mg/l
Exposure time: 48 hrs
Test substance: Product

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LC50 *Daphnia magna* (Water flea): 0.006 mg/l

Exposure time: 48 hrs

Test substance: Active Substance

LC50 American Oyster: 0.055 mg/l

Exposure time: 48 hrs

Test substance: Active Substance

LC50 Mysid Shrimp (*Mysidopsis bahia*): 0.092 mg/l

Exposure time: 96 hrs

Test substance: Active Substance

EC50 American Oyster: 0.048 mg/l

Exposure time: 48 hrs

Test substance: Active Substance

LC50 *Ceriodaphnia dubia*: 0.54 mg/l

Exposure time: 48 h

Test substance: Product

EC50 *Ceriodaphnia dubia*: 0.43 mg/l

Exposure time: 48 h

Test substance: Product

NOEC *Ceriodaphnia dubia*: 0.13 mg/l

Exposure time: 48 h

Test substance: Product

Toxicity to fish (Chronic toxicity)

: NOEC: 0.032 mg/l

Exposure time: 34 Days

Species: Fathead Minnow

Test substance: Active Substance

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

: LOEC: 1,200 mg/l

Exposure time: 28 Days

Species: Midge (Diptera)

Test substance: Active Substance

Test Type: Sediment

NOEC: 0.004 mg/l

Exposure time: 21 Days

Species: *Daphnia magna*

Test substance: Active Substance

Test Type: 3 Brood

NOEC: 520 mg/l

Exposure time: 28 Days

Species: Midge (Diptera)

Test substance: Active Substance

Test Type: Sediment

Components

Toxicity to algae

: n-Alkyl dimethyl benzyl ammonium chlorides

NOEC : 0.009 mg/l

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Components

Toxicity to bacteria : Isopropanol
1,050 mg/l

Persistence and degradability

The organic portion of this preparation is expected to be inherently biodegradable. Active Substance OECD 301 B (Modified Sturm Test) >80%

Chemical Oxygen Demand (COD): 754,000 mg/l

Biochemical Oxygen Demand (BOD):

Incubation Period	Value	Test Descriptor
5 d	583,333 mg/l	Product

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

Component substances have a potential to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: : D001

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

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NALCON® 7648

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : CORROSIVE LIQUID, FLAMMABLE, N.O.S.
Technical name(s) : QUATERNARY AMMONIUM COMPOUND, ISOPROPANOL
UN/ID No. : UN 2920
Transport hazard class(es) : 8, 3
Packing group : II

Air transport (IATA)

Proper shipping name : CORROSIVE LIQUID, FLAMMABLE, N.O.S.
Technical name(s) : QUATERNARY AMMONIUM COMPOUND, ISOPROPANOL
UN/ID No. : UN 2920
Transport hazard class(es) : 8, 3
Packing group : II

Sea transport (IMDG/IMO)

Proper shipping name : CORROSIVE LIQUID, FLAMMABLE, N.O.S.
Technical name(s) : QUATERNARY AMMONIUM COMPOUND, ISOPROPANOL
UN/ID No. : UN 2920
Transport hazard class(es) : 8, 3
Packing group : II

*Marine pollutant : QUATERNARY AMMONIUM COMPOUND

* Note: This product is regulated as a Marine Pollutant when shipped by Rail or Highway (in bulk quantities), and when shipped by water in all quantities.

Section: 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPA Reg. No. : 1706-151

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This product does not contain a RQ substance, or this product contains a substance with a RQ, however the calculated RQ exceeds the reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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- SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
- SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

 **WARNING:** Reproductive Harm - www.P65Warnings.ca.gov

Ethylene Glycol

107-21-1

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

Australia. Australian Industrial Chemicals Introduction Scheme (AICIS)

All substances in this product comply with the Australian Industrial Chemicals Introduction Scheme (AICIS)

Canadian Domestic Substances List (DSL)

Substances regulated under the Pest Control Products Act are exempt from CEPA New Substance Notification requirements.

Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

China Inventory of Existing Chemical Substances

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

Taiwan Chemical Substance Inventory

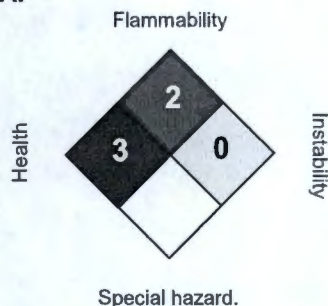
All substances in this product comply with the Taiwan Existing Chemical Substances Inventory (ECSI).

Section: 16. OTHER INFORMATION

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NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 12/23/2020
Version Number : 1.6
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.

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Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : C-9

Other means of identification : Not applicable.

Recommended use : CORROSION INHIBITOR

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 08/22/2016

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Corrosive to metals : Category 1

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion : Category 1

Serious eye damage : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Danger
Danger

Hazard Statements : Harmful if swallowed.
Causes severe skin burns and eye damage.
Toxic if inhaled.
May be corrosive to metals.
Harmful if swallowed or if inhaled
Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**

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- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention immediately.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only

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with adequate ventilation. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Conditions for safe storage : Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.

Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.

Unsuitable material : not determined

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Phosphoric Acid	7664-38-2	TWA	1 mg/m ³	ACGIH
		STEL	3 mg/m ³	ACGIH
		TWA	1 mg/m ³	NIOSH REL
		STEL	3 mg/m ³	NIOSH REL
		TWA	1 mg/m ³	OSHA Z1
Zinc Chloride	7646-85-7	TWA (Fumes)	1 mg/m ³	OSHA Z1
		TWA (Fumes)	1 mg/m ³	ACGIH
		STEL (Fumes)	2 mg/m ³	ACGIH
		TWA (Fumes)	1 mg/m ³	NIOSH REL
		STEL (Fumes)	2 mg/m ³	NIOSH REL

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

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Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Colour	: colourless
Odour	: odourless
Flash point	: > 93.3 °C
pH	: < 1.0, 100 %, (25 °C)
Odour Threshold	: no data available
Melting point/freezing point	: FREEZING POINT: -20 °C, ASTM D-1177
Initial boiling point and boiling range	: > 100 °C
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: similar to water
Relative vapour density	: no data available
Relative density	: 1.56 - 1.6, (25 °C),
Density	: 13.3 lb/gal
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition temperature	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: 0 %, EPA Method 24

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas. Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	: None known.

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Incompatible materials : Strong bases

Hazardous decomposition products : Decomposition products may include the following materials:
Carbon oxides
nitrogen oxides (NOx)
Sulphur oxides
Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns.

Ingestion : Harmful if swallowed. Causes digestive tract burns.

Inhalation : Toxic if inhaled. Harmful if inhaled. May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Corrosion

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory Irritation, Cough

Toxicity

Product

Acute oral toxicity : LD50 rat: 1,530 mg/kg
Test substance: Hazardous component
LD50 rat: 350 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 2.55 mg/l
Exposure time: 4 h

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Skin corrosion/irritation : no data available

Serious eye damage/eye irritation : no data available

Respiratory or skin sensitization : no data available

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Carcinogenicity : no data available
Reproductive effects : no data available
Germ cell mutagenicity : no data available
Teratogenicity : no data available
STOT - single exposure : no data available
STOT - repeated exposure : no data available
Aspiration toxicity : no data available

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Product

Toxicity to fish : LC50 *Lepomis macrochirus* (Bluegill sunfish): 2.86 - 3.78 mg/l
Exposure time: 96 hrs

LC50 *Inland Silverside*: > 5,000 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 *Lepomis macrochirus* (Bluegill sunfish): 3.8 - 8.8 mg/l
Exposure time: 96 hrs
Test substance: Hazardous component

LC50 *Zebra Danio*: 18.18 mg/l
Exposure time: 96 hrs
Test substance: Hazardous component

LC50 *Pimephales promelas* (fathead minnow): 27 mg/l
Exposure time: 96 hrs
Test substance: Product
Test Type: Static

NOEC *Pimephales promelas* (fathead minnow): 3.1 mg/l
Exposure time: 96 hrs
Test substance: Product
Test Type: Static

Toxicity to daphnia and other aquatic invertebrates : LC50 *Mysid Shrimp* (*Mysidopsis bahia*): 4.8 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 *Daphnia magna* (Water flea): 0.158 mg/l
Exposure time: 48 hrs
Test substance: Hazardous component

LC50 *Daphnia magna* (Water flea): 10.3 mg/l
Exposure time: 48 hrs

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Test substance: Product

Test Type: Static

NOEC Daphnia magna (Water flea): 1.3 mg/l

Exposure time: 48 hrs

Test substance: Product

Test Type: Static

Components

Toxicity to algae

: Phosphoric Acid

EC50 Desmodesmus subspicatus (green algae): > 100 mg/l

Exposure time: 72 h

Persistence and degradability

no data available

Mobility

no data available

Bioaccumulative potential

no data available

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: : D002

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

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The presence of an RQ component (Reportable Quantity for U.S. DOT) in this product causes it to be regulated with an additional description of RQ for road, or as Environmentally hazardous for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

Land transport (DOT)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name(s) : ZINC CHLORIDE, PHOSPHORIC ACID
UN/ID No. : UN 3264
Transport hazard class(es) : 8
Packing group : III
Reportable Quantity (per package) : 3,730 lbs
RQ Component : ZINC CHLORIDE

Air transport (IATA)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name(s) : Zinc Chloride, Phosphoric Acid
UN/ID No. : UN 3264
Transport hazard class(es) : 8
Packing group : III
Reportable Quantity (per package) : 3,730 lbs
RQ Component : ZINC CHLORIDE

Sea transport (IMDG/IMO)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name(s) : ZINC CHLORIDE, PHOSPHORIC ACID
UN/ID No. : UN 3264
Transport hazard class(es) : 8
Packing group : III

*Marine pollutant : ZINC CHLORIDE

*Note: This product is regulated as a Marine Pollutant when shipped by Rail, Highway (in bulk quantities), or Air (if no other hazard class applies), and when shipped by water in all quantities.

Section: 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Zinc Chloride	7646-85-7	1000	3734

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

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SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
Zinc Chloride 7646-85-7 10 - 30 %

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

TOXIC SUBSTANCES CONTROL ACT (TSCA)

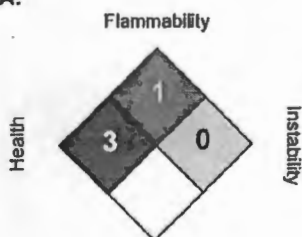
The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 08/22/2016
Version Number : 1.1
Prepared By : Regulatory Affairs

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SAFETY DATA SHEET

PURATE

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PURATE

Other means of identification : Not applicable.

Recommended use : BIOCIDAL PRECURSOR

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 06/04/2019

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Oxidizing liquids : Category 1
Acute toxicity (Inhalation) : Category 4
Acute toxicity (Dermal) : Category 4
Serious eye damage : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : May cause fire or explosion; strong oxidiser.
Harmful in contact with skin or if inhaled
Causes serious eye damage.

Precautionary Statements : **Prevention:**
Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wear protective gloves/ eye protection/ face protection. Wear fire/ flame resistant/ retardant clothing.
Response:
IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

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present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Sodium Chlorate	7775-09-9	30 - 60
Hydrogen Peroxide	7722-84-1	5 - 10

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops and persists.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.

Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during firefighting : Oxidizer. Contact with other material may cause fire.

Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

Special protective equipment for firefighters : Use personal protective equipment.

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Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.

Conditions for safe storage : Keep in a cool, well-ventilated place. Keep away from reducing agents. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.

Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.

Unsuitable material : not determined

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Hydrogen Peroxide	7722-84-1	TWA	1 ppm	ACGIH
		TWA	1 ppm 1.4 mg/m ³	NIOSH REL
		TWA	1 ppm 1.4 mg/m ³	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

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Eye protection	: Safety goggles Face-shield
Hand protection	: Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	: Wear suitable protective clothing.
Respiratory protection	: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Colour	: colourless
Odour	: Slight, Pungent
Flash point	: does not flash
pH	: 2 - 6
Odour Threshold	: no data available
Melting point/freezing point	: no data available
Initial boiling point and boiling range	: 104.0 °C
Evaporation rate	: > 1
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: 6.7 kPa, (40 °C),
Relative vapour density	: no data available
Relative density	: 1.3400 - 1.3900, (25 °C),
Density	: 11.4 lb/gal
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available

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Viscosity, dynamic	: 1.8 mPa.s (20 °C)
Viscosity, kinematic	: no data available
Oxidizing properties	: The substance or mixture is classified as oxidizing with the category 2.
Molecular weight	: no data available
VOC	: 0 %, Calculation method

Section: 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Mineral Acids Organic materials Flammable materials Powdered metals Zinc(Zn)
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Harmful in contact with skin.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Harmful if inhaled.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact	: Redness, Pain, Corrosion
Skin contact	: No symptoms known or expected.

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Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Acute toxicity estimate: 3,555 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 10 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute toxicity estimate: > 40 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : Acute toxicity estimate: > 1,000 mg/kg

Skin corrosion/irritation : no data available

Serious eye damage/eye irritation : Result: Irreversible effects on the eye
Method: Expert judgement

Respiratory or skin sensitization : no data available

Carcinogenicity : no data available

Reproductive effects : No reproductive toxic effects expected.

Germ cell mutagenicity : Contains no ingredient listed as a mutagen

Teratogenicity : no data available

STOT - single exposure : no data available

STOT - repeated exposure : no data available

Aspiration toxicity : Based on available data, the classification criteria are not met.

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : Harmful to aquatic life.

Components

Toxicity to fish : Sodium Chlorate
LC50 Fish: > 1,000 mg/l
Exposure time: 96 h

Components

Toxicity to daphnia and other aquatic invertebrates : Sodium Chlorate
EC50 : > 1,000 mg/l
Exposure time: 48 h

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PURATE

Components

Toxicity to algae	: Sodium Chlorate EC50 : > 1,000 mg/l Exposure time: 72 h
	Hydrogen Peroxide EC50 : 1.38 mg/l Exposure time: 72 h

Persistence and degradability

Greater than 95% of this product consists of inorganic substances for which a biodegradation value is not applicable.

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

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The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : SODIUM CHLORATE, AQUEOUS SOLUTION
Technical name(s) :
UN/ID No. : UN 2428
Transport hazard class(es) : 5.1
Packing group : II

Air transport (IATA)

Proper shipping name : SODIUM CHLORATE, AQUEOUS SOLUTION
Technical name(s) :
UN/ID No. : UN 2428
Transport hazard class(es) : 5.1
Packing group : II

Sea transport (IMDG/IMO)

Proper shipping name : SODIUM CHLORATE, AQUEOUS SOLUTION
Technical name(s) :
UN/ID No. : UN 2428
Transport hazard class(es) : 5.1
Packing group : II

Section: 15. REGULATORY INFORMATION

TSCA list : Not relevant

EPA Reg. No. : 1706-242

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This product does not contain a RQ substance, or this product contains a substance with a RQ, however the calculated RQ exceeds the reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Oxidiser (liquid, solid or gas)
Acute toxicity (any route of exposure)
Serious eye damage or eye irritation

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
Hydrogen Peroxide 7722-84-1

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SAFETY DATA SHEET

PURATE

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

Australia. Industrial Chemical (Notification and Assessment) Act

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

China Inventory of Existing Chemical Substances

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

Taiwan Chemical Substance Inventory

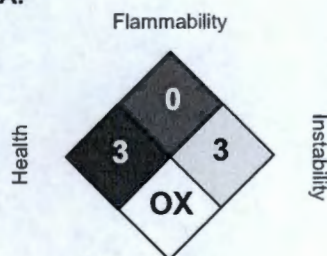
All substances in this product comply with the Taiwan Existing Chemical Substances Inventory (ECSI).

Section: 16. OTHER INFORMATION

SAFETY DATA SHEET

PURATE

NFPA:



HMIS III:

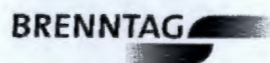
HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	3

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 06/04/2019
Version Number : 1.5
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.



SAFETY DATA SHEET

1. Identification

Product identifier SODIUM HYPOCHLORITE 12.5% NSF
Other means of identification None.
Recommended use ALL PROPER AND LEGAL PURPOSES
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information
Manufacturer
Company name Brenntag Mid-South, Inc.
Address 1405 Highway 136, West
Henderson, KY 42420
Telephone 270-830-1222
E-mail Not available.
Emergency phone number 800-424-9300 CHEMTREC

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1
Environmental hazards Not classified.
OSHA defined hazards Not classified.
Label elements



Signal word Danger
Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage.
Precautionary statement
Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.
Storage Store locked up.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information 12.5% of the mixture consists of component(s) of unknown acute dermal toxicity. 99.3% of the mixture consists of component(s) of unknown acute inhalation toxicity.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
HYPOCHLOROUS ACID, SODIUM SALT (1:1)		7681-52-9	12.5
SODIUM HYDROXIDE (NA(OH))		1310-73-2	0.7
Other components below reportable levels			86.8

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	Ceiling	2 mg/m3

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9)	STEL	2 mg/m3

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Physical state	Liquid.
Form	Liquid.
Color	CLEAR PALE YELLOW

Odor CHLORINE

Odor threshold Not available.

pH 11.5 - 13.5

Melting point/freezing point -3 °F (-19.44 °C)

Initial boiling point and boiling range 230.55 °F (110.3 °C) estimated

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 10.00 lbs/gal

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Percent volatile 86.8 % estimated

Specific gravity 1.2

10. Stability and reactivity

Reactivity Reacts violently with strong acids. This product may react with oxidizing agents.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid Contact with incompatible materials. Do not mix with other chemicals.

Incompatible materials Acids. Oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes severe skin burns.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species		Test Results
HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9)			
Aquatic			
Fish	LC50	Chinook salmon (<i>Oncorhynchus tshawytscha</i>)	0.038 - 0.065 mg/l, 96 hours
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (<i>Ceriodaphnia dubia</i>)	34.59 - 47.13 mg/l, 48 hours
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>)	125 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN1791

UN proper shipping name HYPOCHLORITE SOLUTIONS MARINE POLLUTANT (SODIUM HYPOCHLORITE) RQ

Transport hazard class(es)

Class 8

Subsidiary risk -

Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

ERG number 154

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

HYPOCHLOROUS ACID, SODIUM SALT (1:1) (CAS 7681-52-9) Listed.

SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US, California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 11-11-2016

Revision date 11-15-2018

Version # 25

HMIS® ratings Health: 3
Flammability: 0
Physical hazard: 0

NFPA ratings Health: 3
Flammability: 0
Instability: 0

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