



Alabama Department of Environmental Management  
adem.alabama.gov

APRIL 26, 2024 1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
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MR. DANIEL COX  
PLANT MANAGER  
ARCLIN USA LLC  
14139 US HIGHWAY 84  
ANDALUSIA, AL 36421

**RE: DRAFT PERMIT  
NPDES PERMIT NUMBER AL0000868**

Dear Mr. Cox:

Transmitted herein is a 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](mailto:victoria.kim@adem.alabama.gov) or by phone at (334) 271-7895.

Sincerely,

A handwritten signature in black ink, appearing to read "SR", enclosed in a circular scribble.

Scott Ramsey, Chief  
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





# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

**PERMITTEE:** ARCLIN USA LLC

**FACILITY LOCATION:** ARCLIN, INC.  
14139 US HIGHWAY 84  
ANDALUSIA, ALABAMA 36421  
COVINGTON COUNTY

**PERMIT NUMBER:** AL0000868

**RECEIVING WATERS:** 001-003 - UNNAMED TRIBUTARY TO PRESTWOOD CREEK  
004 - CONECUH RIVER

*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:**

## DRAFT

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Alabama Department of Environmental Management

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**PART I: DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS**

**A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

**DSN 0011: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	*****	*****	*****	5.5 Minimum Daily	*****	*****	mg/l	Weekly	Grab	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	8.5 Maximum Daily	S.U.	Weekly	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	3.48 Monthly Average	8.66 Maximum Daily	lbs/day	*****	*****	*****	*****	Weekly	Composite	All Months
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	2.2 Monthly Average	3.3 Maximum Daily	mg/l	Weekly	Composite	All Months
Arsenic, Total Recoverable (00978) Effluent Gross Value	*****	*****	*****	*****	0.303 Monthly Average	0.606 Maximum Daily	ug/l	Monthly	Composite	All Months
Zinc Total Recoverable (01094) Effluent Gross Value	*****	*****	*****	*****	(Report) Monthly Average	(Report) Maximum Daily	mg/l	Monthly	Composite	All Months
Lead, Total Recoverable (01114) Effluent Gross Value	*****	*****	*****	*****	(Report) Monthly Average	(Report) Maximum Daily	mg/l	Monthly	Composite	All Months
Copper Total Recoverable (01119) Effluent Gross Value	*****	*****	*****	*****	0.0128 Monthly Average	0.0180 Maximum Daily	mg/l	Monthly	Composite	All Months
Bromoform (32104) Effluent Gross Value	*****	*****	*****	*****	78.8 Monthly Average	157.6 Maximum Daily	ug/l	Monthly	Composite	All Months

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

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

**DSN 0011 (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	(Report) Monthly Average	(Report) Maximum Daily		*****	*****	*****				
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Daily	Totalizer	All Months
Chlorine, Total Residual (50060) See notes (1,2) Effluent Gross Value	*****	*****	*****	*****	0.011 Monthly Average	0.019 Maximum Daily	mg/l	Monthly	Grab	All Months
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	2.69 Monthly Average	4.03 Maximum Daily	lbs/day	*****	*****	*****	*****	Weekly	Composite	All Months

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- 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/ A measurement of Total Residual Chlorine below 0.05 mg/l shall be considered in compliance with the permit limitations above and should be reported as NODI=B or \*B on the discharge monitoring reports.

**DSN 001P: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Perfluorooctanoic Acid (51521) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorobutanoic Acid (51522) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorooctanesulfonamide (51525) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoropentanoic Acid (51623) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorohexanoic Acid (51624) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoroheptanoic Acid (51625) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorononanoic acid (51626) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorodecanoic Acid (51627) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoroundecanoic Acid (51628) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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- 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/ EPA Method 1633, or alternative methods specifically approved by the Department, shall be used for the analyses of Per- and Polyfluorinated Alkyl Substances (PFAS).

**DSN 001P (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Perfluorododecanoic acid (51629) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorotridecanoic Acid (51630) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorotetradecanoic Acid (51631) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
N-ethyl perfluorooctanesulfonamidoethanol (51641) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
N-methyl perfluorooctanesulfonamidoethanol (51642) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
2-(N-ethyl-PFOA) acetic acid (51643) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
2-(N-methyl-PFOA) acetic acid (51644) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorobutanesulfonic acid (52602) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorodecanesulfonic acid (52603) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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**DSN 001P (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Perfluoroheptanesulfonic acid (52604) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorohexanesulfonic acid (52605) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorooctanesulfonic acid (52606) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (52607) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (52608) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (52609) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoropentansulfonic acid (52610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorononanesulfonic acid (52611) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Hexafluoropropylene oxide dimer acid (52612) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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**DSN 001P (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek. 3/**

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Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Nonafluoro-3,6-dioxaheptanoic acid (52626) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoro(2-ethoxyethane)sulfonic acid (52629) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorododecanesulfonic acid (52632) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
4,8-Dioxa-3H-perfluorononanoic acid (52636) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
N-methyl perfluorooctanesulfonamide (52641) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
N-ethyl perfluorooctanesulfonamide (52642) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
3-Perfluoropropyl propanoic acid (PF001) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoro-3-methoxypropanoic acid (PF002) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (PF003) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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- 3/ EPA Method 1633, or alternative methods specifically approved by the Department, shall be used for the analyses of Per- and Polyfluorinated Alkyl Substances (PFAS).

**DSN 001P (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek. 3/**

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Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (PF004) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
3-Perfluoroheptyl propanoic acid (PF005) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoro-4-methoxybutanoic acid (PF006) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
2H,2H,3H,3H-Perfluorooctanoic acid (PF007) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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- 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/ EPA Method 1633, or alternative methods specifically approved by the Department, shall be used for the analyses of Per- and Polyfluorinated Alkyl Substances (PFAS).

**DSN 001S: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek. 3/**

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Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Toxicity, Ceriodaphnia Chronic (61426) Effluent Gross Value	*****	0 Single Sample	pass=0:fail=1	*****	*****	*****	*****	Semi-Annually	Composite	All Months
Toxicity, Pimephales Chronic (61428) Effluent Gross Value	*****	0 Single Sample	pass=0:fail=1	*****	*****	*****	*****	Semi-Annually	Composite	All Months

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- 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.D for Chronic Toxicity Requirements.

**DSN 001Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
		(Report) Maximum Daily								
Cyanide, Total (As CN) (00720) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Chromium, Total (As Cr) (01034) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Copper, Total (As Cu) (01042) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Lead, Total (As Pb) (01051) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Nickel, Total (As Ni) (01067) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Zinc, Total (As Zn) (01092) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Carbon Tetrachloride (32102) Effluent Gross Value	0.0001 Monthly Average	0.0001 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2-Dichloroethane (32103) Effluent Gross Value	0.0023 Monthly Average	0.0023 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Chloroform (32106) Effluent Gross Value	0.0023 Monthly Average	0.0049 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.

**DSN 001Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		*****	*****	*****				
Toluene (34010) Effluent Gross Value	0.002 Monthly Average	0.004 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Benzene (34030) Effluent Gross Value	0.0017 Monthly Average	0.0017 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Acenaphthylene (34200) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Acenaphthene (34205) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Acrylonitrile (34215) Effluent Gross Value	0.000015 Monthly Average	0.000015 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Anthracene (34220) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Benzo (K) Fluoranthene (34242) Effluent Gross Value	0.000001 Monthly Average	0.000001 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Benzo (A) Pyrene (34247) Effluent Gross Value	0.000001 Monthly Average	0.000001 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Chlorobenzene (34301) Effluent Gross Value	0.0016 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months

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- 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.

**DSN 001Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		*****	*****	*****				
Chrysene (34320) Effluent Gross Value	0.000001	0.000001	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Diethyl Phthalate (34336) Effluent Gross Value	0.0030	0.0060	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Dimethyl Phthalate (34341) Effluent Gross Value	0.001	0.003	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Ethylbenzene (34371) Effluent Gross Value	0.0034	0.0116	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Fluoranthene (34376) Effluent Gross Value	0.001	0.003	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Fluorene (34381) Effluent Gross Value	0.001	0.003	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Hexachlorobutadiene (34391) Effluent Gross Value	0.0012	0.0012	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Hexachloroethane (34396) Effluent Gross Value	0.00025	0.00025	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Methyl Chloride (34418) Effluent Gross Value	0.006	0.016	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months

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- 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.

**DSN 001Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		****	****	****				
Methylene Chloride (34423) Effluent Gross Value	0.002 Monthly Average	0.009 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Nitrobenzene (34447) Effluent Gross Value	0.0029 Monthly Average	0.0073 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Phenanthrene (34461) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Pyrene (34469) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Tetrachloroethylene (34475) Effluent Gross Value	0.0002 Monthly Average	0.0002 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
1,1-Dichloroethane (34496) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
1,1-Dichloroethylene (34501) Effluent Gross Value	0.0012 Monthly Average	0.0033 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
1,1,1-Trichloroethane (34506) Effluent Gross Value	0.0012 Monthly Average	0.0033 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
1,1,2-Trichloroethane (34511) Effluent Gross Value	0.0010 Monthly Average	0.0010 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.



**DSN 001Y: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		*****	*****	*****				
Benzo (A) Anthracene (34526) Effluent Gross Value	0.000001	0.000001	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2-Dichlorobenzene (34536) Effluent Gross Value	0.0083	0.0175	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2-Dichloropropane (34541) Effluent Gross Value	0.000912	0.000912	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2-Trans-Dichloroethylene (34546) Effluent Gross Value	0.0014	0.0037	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2,4-Trichlorobenzene (34551) Effluent Gross Value	0.0044	0.0044	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,3-Dichlorobenzene (34566) Effluent Gross Value	0.0033	0.0047	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,4-Dichlorobenzene (34571) Effluent Gross Value	0.0016	0.003	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2-Chlorophenol (34586) Effluent Gross Value	0.0000	0.0000	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2-Nitrophenol (34591) Effluent Gross Value	0.004	0.0074	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months

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- 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.

**DSN 001Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		*****	*****	*****				
2,4-Dichlorophenol (34601) Effluent Gross Value	0.0000	0.0000	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2,4-Dimethylphenol (34606) Effluent Gross Value	0.001	0.003	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2,4-Dinitrotoluene (34611) Effluent Gross Value	0.0000	0.0000	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2,4-Dinitrophenol (34616) Effluent Gross Value	0.0076	0.0132	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2,6-Dinitrotoluene (34626) Effluent Gross Value	0.0000	0.0000	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
4-Nitrophenol (34646) Effluent Gross Value	0.0077	0.0133	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
4,6-Dinitro-O-Cresol (34657) Effluent Gross Value	0.0043	0.0154	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Phenol, Single Compound (34694) Effluent Gross Value	0.0011	0.0026	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Naphthalene (34696) Effluent Gross Value	0.001	0.003	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.

**DSN 001Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		*****	*****	*****				
Bis (2-Ethylhexyl) Phthalate (39100) Effluent Gross Value	0.000138	0.000138	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Di-N-Butyl Phthalate (39110) Effluent Gross Value	0.001	0.002	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Vinyl Chloride (39175) Effluent Gross Value	0.0002	0.0002	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Trichloroethylene (39180) Effluent Gross Value	0.0010	0.0019	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Hexachlorobenzene (39700) Effluent Gross Value	0.00000002	0.00000002	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,3 Dichloropropene (77163) Effluent Gross Value	0.0013	0.0013	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
3,4 Benzofluoranthene (79531) Effluent Gross Value	0.000001	0.000001	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Chloroethane (85811) Effluent Gross Value	0.006	0.016	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.

**DSN 0021: Once-through Non-Contact Cooling Water**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Temperature, Water Deg. Fahrenheit (00011) Effluent Gross Value	*****	*****	*****	*****	*****	90 Maximum Daily	deg F	Monthly	Grab	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	8.5 Maximum Daily	S.U.	Monthly	Grab	All Months
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Monthly	Instantaneous	All Months
Chlorine, Total Residual (50060) See notes (1,2) 4/ Effluent Gross Value	*****	*****	*****	*****	0.011 Monthly Average	0.019 Maximum Daily	mg/l	Monthly	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/ A measurement of Total Residual Chlorine below 0.05 mg/l shall be considered in compliance with the permit limitations above and should be reported as NODI=B or \*B on the discharge monitoring reports.

**DSN 003S: Stormwater runoff commingled with air conditioner condensate and fire testing water.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
BOD, 5-Day (20 Deg. C) (00310) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	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	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Nitrogen, Total (As N) (00600) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months
Carbon, Tot Organic (TOC) (00680) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) 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.

**DSN 0041: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	*****	*****	*****	2.0 Minimum Daily	*****	*****	mg/l	Weekly	Grab	All Months
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	8.5 Maximum Daily	S.U.	Weekly	Grab	All Months
Solids, Total Suspended (00530) Effluent Gross Value	4.3 Monthly Average	13.0 Maximum Daily	lbs/day	*****	*****	*****	*****	Weekly	Composite	All Months
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	20.0 Monthly Average	30.0 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	*****	*****	*****	*****	Daily	Totalizer	All Months
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	3.22 Monthly Average	5.38 Maximum Daily	lbs/day	*****	*****	*****	*****	Weekly	Composite	All Months

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

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

**DSN 004P: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Perfluorooctanoic Acid (51521) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorobutanoic Acid (51522) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorooctanesulfonamide (51525) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoropentanoic Acid (51623) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorohexanoic Acid (51624) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoroheptanoic Acid (51625) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorononanoic acid (51626) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorodecanoic Acid (51627) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoroundecanoic Acid (51628) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/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.**

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- 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/ EPA Method 1633, or alternative methods specifically approved by the Department, shall be used for the analyses of Per- and Polyfluorinated Alkyl Substances (PFAS).

DSN 004P (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal	
Perfluorododecanoic acid (51629) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorotridecanoic Acid (51630) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorotetradecanoic Acid (51631) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
N-ethyl perfluorooctanesulfonamidoethanol (51641) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
N-methyl perfluorooctanesulfonamidoethanol (51642) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
2-(N-ethyl-PFOA) acetic acid (51643) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
2-(N-methyl-PFOA) acetic acid (51644) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorobutanesulfonic acid (52602) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorodecanesulfonic acid (52603) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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- 3/ EPA Method 1633, or alternative methods specifically approved by the Department, shall be used for the analyses of Per- and Polyfluorinated Alkyl Substances (PFAS).



**DSN 004P (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Perfluoroheptanesulfonic acid (52604) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorohexanesulfonic acid (52605) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorooctanesulfonic acid (52606) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (52607) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (52608) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (52609) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoropentansulfonic acid (52610) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorononanesulfonic acid (52611) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Hexafluoropropylene oxide dimer acid (52612) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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**DSN 004P (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Nonfluoro-3,6-dioxaheptanoic acid (52626) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoro(2-ethoxyethane)sulfonic acid (52629) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluorododecanesulfonic acid (52632) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
4,8-Dioxa-3H-perfluorononanoic acid (52636) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
N-methyl perfluorooctanesulfonamide (52641) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
N-ethyl perfluorooctanesulfonamide (52642) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
3-Perfluoropropyl propanoic acid (PF001) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoro-3-methoxypropanoic acid (PF002) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (PF003) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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- 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/ EPA Method 1633, or alternative methods specifically approved by the Department, shall be used for the analyses of Per- and Polyfluorinated Alkyl Substances (PFAS).

**DSN 004P (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (PF004) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
3-Perfluoroheptyl propanoic acid (PF005) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
Perfluoro-4-methoxybutanoic acid (PF006) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months
2H,2H,3H,3H-Perfluorooctanoic acid (PF007) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months

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- 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/ EPA Method 1633, or alternative methods specifically approved by the Department, shall be used for the analyses of Per- and Polyfluorinated Alkyl Substances (PFAS).

**DSN 004S: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River. 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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Toxicity, Ceriodaphnia Acute (61425) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	Semi-Annually	Grab	All Months
Toxicity, Pimephales Acute (61427) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	Semi-Annually	Grab	All Months

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- 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.C for Acute Toxicity Requirements.

**DSN 004Y: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
		(Report) Maximum Daily								
Cyanide, Total (As CN) (00720) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Chromium, Total (As Cr) (01034) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Copper, Total (As Cu) (01042) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Lead, Total (As Pb) (01051) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Nickel, Total (As Ni) (01067) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Zinc, Total (As Zn) (01092) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Carbon Tetrachloride (32102) Effluent Gross Value	0.0080 Monthly Average	0.021 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2-Dichloroethane (32103) Effluent Gross Value	0.0100 Monthly Average	0.0320 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Chloroform (32106) Effluent Gross Value	0.0060 Monthly Average	0.0180 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months

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- 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.

**DSN 004Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		****	****	****				
Toluene (34010) Effluent Gross Value	0.0020 Monthly Average	0.0040 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Benzene (34030) Effluent Gross Value	0.0030 Monthly Average	0.0070 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Acenaphthylene (34200) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Acenaphthene (34205) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Acrylonitrile (34215) Effluent Gross Value	0.0050 Monthly Average	0.0130 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Anthracene (34220) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Benzo (K) Fluoranthene (34242) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Benzo (A) Pyrene (34247) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months
Chlorobenzene (34301) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months

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**DSN 004Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Chrysene (34320) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Diethyl Phthalate (34336) Effluent Gross Value	0.0030 Monthly Average	0.0060 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Dimethyl Phthalate (34341) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Ethylbenzene (34371) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Fluoranthene (34376) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Fluorene (34381) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Hexachlorobutadiene (34391) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Hexachloroethane (34396) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Methyl Chloride (34418) Effluent Gross Value	0.0060 Monthly Average	0.0160 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months

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**DSN 004Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
Methylene Chloride (34423) Effluent Gross Value	0.0020 Monthly Average	0.0090 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Nitrobenzene (34447) Effluent Gross Value	0.1240 Monthly Average	0.3560 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Phenanthrene (34461) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Pyrene (34469) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Tetrachloroethylene (34475) Effluent Gross Value	0.0030 Monthly Average	0.0090 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,1-Dichloroethane (34496) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,1-Dichloroethylene (34501) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,1,1-Trichloroethane (34506) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,1,2-Trichloroethane (34511) Effluent Gross Value	0.0020 Monthly Average	0.0070 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months

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**DSN 004Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Frequency <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		*****	*****	*****				
Benzo (A) Anthracene (34526) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2-Dichlorobenzene (34536) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2-Dichloropropane (34541) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2-Trans-Dichloroethylene (34546) Effluent Gross Value	0.0010 Monthly Average	0.0040 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,2,4-Trichlorobenzene (34551) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,3-Dichlorobenzene (34566) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,4-Dichlorobenzene (34571) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2-Chlorophenol (34586) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2-Nitrophenol (34591) Effluent Gross Value	0.0040 Monthly Average	0.0130 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.

**DSN 004Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		*****	*****	*****				
2,4-Dichlorophenol (34601) Effluent Gross Value	0.0000	0.0000	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2,4-Dimethylphenol (34606) Effluent Gross Value	0.0010	0.0030	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2,4-Dinitrotoluene (34611) Effluent Gross Value	0.0000	0.0000	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2,4-Dinitrophenol (34616) Effluent Gross Value	0.0670	0.2380	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
2,6-Dinitrotoluene (34626) Effluent Gross Value	0.0000	0.0000	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
4-Nitrophenol (34646) Effluent Gross Value	0.0090	0.0320	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
4,6-Dinitro-O-Cresol (34657) Effluent Gross Value	0.0040	0.0150	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Phenol, Single Compound (34694) Effluent Gross Value	0.0010	0.0030	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Naphthalene (34696) Effluent Gross Value	0.0010	0.0030	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months

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- 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.
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**DSN 004Y (Continued): Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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 <sup>2</sup>	Sample Type <sup>1</sup>	Seasonal
	Monthly Average	Maximum Daily		*****	*****	*****				
Bis (2-Ethylhexyl) Phthalate (39100) Effluent Gross Value	0.0050	0.0140	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Di-N-Butyl Phthalate (39110) Effluent Gross Value	0.0010	0.0020	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Vinyl Chloride (39175) Effluent Gross Value	0.0050	0.0100	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Trichloroethylene (39180) Effluent Gross Value	0.0010	0.0040	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Hexachlorobenzene (39700) Effluent Gross Value	0.0017	0.0017	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
1,3 Dichloropropene (77163) Effluent Gross Value	0.0110	0.0440	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
3,4 Benzofluoranthene (79531) Effluent Gross Value	0.0010	0.0030	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months
Chloroethane (85811) Effluent Gross Value	0.0060	0.0160	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.**

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- 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.

## 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-dini-trophenol; 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 to ensure that the BMP is continually implemented and effective;
- h. Provide for the use and disposal of any material used to absorb spilled fluids that could contaminate stormwater;
- i. Develop a solvent management plan, if solvents are used on site. The solvent management plan shall include as a minimum lists of the solvents on site; the disposal method of solvents used instead of dumping, such as reclamation, contract hauling; and the procedures for assuring that solvents do not routinely spill or leak into the stormwater;
- j. Provide for the disposal of all used oils, hydraulic fluids, 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. ACUTE 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 tests shall be performed using undiluted effluent.
- (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/600R-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



## D. CHRONIC TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS

1. The permittee shall perform short-term chronic toxicity tests on the wastewater discharges required to be tested for chronic toxicity by Part I of this permit.

a. Test Requirements

- (1) The tests shall be performed using undiluted effluent.
- (2) Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and the test at the 95% confidence level indicate chronic toxicity and constitute noncompliance with this permit.

b. General Test Requirements

- (1) A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests and collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite 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-02-013 or the 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 80%, *P. promelas* dry weight per surviving control organism is less than 0.25 mg, *Ceriodaphnia* number of young per surviving control organism is less than 15, *Ceriodaphnia* reproduction where less than 60% of surviving control females produce three broods 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 chronic toxicity is indicated (noncompliance with permit limit), the permittee shall perform two additional valid chronic toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall run consecutively beginning on the first calendar week 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-91-003, 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 Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms". The Larval Survival and Growth Test, Methods 1000.0, shall be used for the fathead minnow (*Pimephales promelas*) test and the Survival and Reproduction Test, Method 1002.0, shall be used for the cladoceran (*Ceriodaphnia dubia*) test.

## 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 these requirements or may decrease or increase the frequency of submittals.

a. Introduction

- (1) Facility name, location, and county
- (2) Permit number
- (3) Toxicity testing requirements of permit

- (4) Name of receiving water body
- (5) Contract laboratory information (if tests are performed under contract)
  - (a) Name of firm
  - (b) Telephone number
  - (c) Address
- (6) Objective of test
- b. Plant Operation
  - (1) Discharge Operating schedule (if other than continuous)
  - (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection dates (MGD, CFS, GPM)
  - (3) Design flow of treatment facility at time of sampling
- c. Source of Effluent and Dilution Water
  - (1) Effluent samples
    - (a) Sampling point
    - (b) Sample collection dates and times (to include composite sample start and finish times)
    - (c) Sample collection method
    - (d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
    - (e) Lapsed time from sample collection to delivery
    - (f) Lapsed time from sample collection to test initiation
    - (g) Sample temperature when received at the laboratory
  - (2) Dilution Water
    - (a) Source
    - (b) Collection/preparation date(s) and time(s)
    - (c) Pretreatment (if applicable)
    - (d) Physical and chemical characteristics (water temperature, pH, alkalinity, hardness, 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) Specify if aeration was needed

- (12) Feeding frequency, amount, and type of food
- (13) Specify if (and how) pH control measures were implemented
- (14) Light intensity (mean)
- e. Test Organisms
  - (1) Scientific name
  - (2) Life stage and age
  - (3) Source
  - (4) Disease(s) treatment (if applicable)
- f. Quality Assurance
  - (1) Reference toxicant utilized and source
  - (2) Date and time of most recent chronic reference toxicant test(s), raw data and current control chart(s). The most recent chronic reference toxicant test shall be conducted within 30 days of the routine.
  - (3) Dilution water utilized in reference toxicant test
  - (4) Results of reference toxicant test(s) (NOEC, IC25, PASS/FAIL, etc.), report concentration response relationship and evaluate test sensitivity
  - (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: NOECs, IC25s, PASS/FAIL, etc. (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) (NOEC, IC25, PASS/FAIL, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD) calculated for sub-lethal endpoints determined by hypothesis testing.
- h. Conclusions and Recommendations
  - (1) Relationship between test endpoints and permit limits
  - (2) Actions to be taken

Adapted from "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Fourth Edition, October 2002 (EPA 821-R-02-013), Section 10, Report Preparation

#### **E. COOLING WATER INTAKE STRUCTURE (CWIS) REQUIREMENTS**

1. The entity providing water to the permittee is a public water system in accordance with Section 1401 of the Safe Drinking Water Act; therefore, the permittee is exempt from the requirements of this permit condition.

**ADEM PERMIT RATIONALE**

**PREPARED DATE:** October 3, 2023

**PREPARED BY:** Victoria Kim

Permittee Name: Arclin USA LLC

Facility Name: Arclin, Inc.

Permit Number: AL0000868

PERMIT IS REISSUANCE DUE TO EXPIRATION

**DISCHARGE SERIAL NUMBERS (DSN) & DESCRIPTIONS:**

<b>DSN</b>	<b>Description</b>
001	Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.
002	Once-through Non-Contact Cooling Water
003	Stormwater runoff commingled with air conditioner condensate and fire testing water.
004	Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.

**INDUSTRIAL CATEGORY:** 40 CFR 414.51 (Subpart E – Thermosetting Resins),  
40 CFR 414.61 (Subpart F – Commodity Organic Chemicals),  
40 CFR 414.101 (Subpart J – Direct Discharge Point Sources That Do Not Use End-of-Pipe Biological Treatment)

**MAJOR:** Yes

**STREAM INFORMATION (DSN001, DSN002, DSN003):**

Receiving Stream: Unnamed Tributary to Prestwood Creek  
Classification: Fish & Wildlife  
River Basin: Perdido/Escambia  
7Q10: 0 cfs  
7Q2: 0 cfs  
1Q10: 0 cfs  
Annual Average Flow: 0.1 cfs  
303(d) List: NO  
Impairment: N/A  
TMDL: NO

**STREAM INFORMATION (DSN004):**

Receiving Stream: Conecuh River  
Classification: Fish & Wildlife  
River Basin: Perdido/Escambia  
7Q10: 43.164 cfs  
7Q2: 50.52 cfs

1Q10:	32.373 cfs
Annual Average Flow:	1645.518 cfs
303(d) List:	NO
Impairment:	N/A
TMDL:	NO

**DISCUSSION:**

Arclin USA, LLC manufactures formaldehyde by oxidation of methanol with air. The formaldehyde is then polymerized with urea and phenol to manufacture urea-formaldehyde and phenol-formaldehyde thermosetting resins for the building industry.

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

**DSN 0011: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	*****	*****	*****	5.5 Minimum Daily	*****	*****	mg/l	Weekly	Grab	All Months	WQM
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	8.5 Maximum Daily	S.U.	Weekly	Grab	All Months	WQBEL
Solids, Total Suspended (00530) Effluent Gross Value	3.48 Monthly Average	8.66 Maximum Daily	lbs/day	*****	*****	*****	*****	Weekly	Composite	All Months	EGL
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	*****	*****	*****	*****	2.2 Monthly Average	3.3 Maximum Daily	mg/l	Weekly	Composite	All Months	WQM
Arsenic, Total Recoverable (00978) Effluent Gross Value	*****	*****	*****	*****	0.303 Monthly Average	0.606 Maximum Daily	ug/l	Monthly	Composite	All Months	WQBEL
Zinc Total Recoverable (01094) Effluent Gross Value	*****	*****	*****	*****	(Report) Monthly Average	(Report) Maximum Daily	mg/l	Monthly	Composite	All Months	BPJ
Lead, Total Recoverable (01114) Effluent Gross Value	*****	*****	*****	*****	(Report) Monthly Average	(Report) Maximum Daily	mg/l	Monthly	Composite	All Months	BPJ
Copper Total Recoverable (01119) Effluent Gross Value	*****	*****	*****	*****	0.0128 Monthly Average	0.0180 Maximum Daily	mg/l	Monthly	Composite	All Months	WQBEL
Bromoform (32104) Effluent Gross Value	*****	*****	*****	*****	78.8 Monthly Average	157.6 Maximum Daily	ug/l	Monthly	Composite	All Months	WQBEL
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Daily	Totalizer	All Months	BPJ
Chlorine, Total Residual (50060) See notes (1.2) Effluent Gross Value	*****	*****	*****	*****	0.011 Monthly Average	0.019 Maximum Daily	mg/l	Monthly	Grab	All Months	WQBEL
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	2.69 Monthly Average	4.03 Maximum Daily	lbs/day	*****	*****	*****	*****	Weekly	Composite	All Months	WQM

**DSN 001P: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Perfluorooctanoic Acid (51521) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluorobutanoic Acid (51522) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluorooctanesulfonamide (51525) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Perfluoropentanoic Acid (51623) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorohexanoic Acid (51624) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoroheptanoic Acid (51625) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorononanoic acid (51626) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorodecanoic Acid (51627) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoroundecanoic Acid (51628) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorododecanoic acid (51629) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorotridecanoic Acid (51630) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorotetradecanoic Acid (51631) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
N-ethyl perfluorooctanesulfonamidoethanol (51641) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
N-methyl perfluorooctanesulfonamidoethanol (51642) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
2-(N-ethyl-PFOSA) acetic acid (51643) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
2-(N-methyl-PFOSA) acetic acid (51644) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
3-Perfluoroheptyl propanoic acid (PF005) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
11-Chloroeicosafluoro-3- oxaundecane-1-sulfonic acid (PF004) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
9-Chlorohexadecafluoro-3- oxanonane-1-sulfonic acid (PF003) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoro-3-methoxypropanoic acid (PF002) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
3-Perfluoropropyl propanoic acid (PF001) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
N-ethyl perfluorooctanesulfonamide (52642) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
N-methyl perfluorooctanesulfonamide (52641) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
4,8-Dioxa-3H-perfluorononanoic acid (52636) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorododecanesulfonic acid (52632) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoro(2-ethoxyethane)sulfonic acid (52629) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Nonafluoro-3,6-dioxoheptanoic acid (52626) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorohexanesulfonic acid (52605) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorononanesulfonic acid (52611) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoropentanesulfonic acid (52610) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (52609) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (52608) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (52607) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorooctanesulfonic acid (52606) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoro-4-methoxybutanoic acid (PF006) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ



Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Perfluoroheptanesulfonic acid (52604) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorodecanesulfonic acid (52603) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorobutanesulfonic acid (52602) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Hexafluoropropylene oxide dimer acid (52612) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
2H,2H,3H,3H-Perfluorooctanoic acid (PF007) Effluent Gross Value	*****	*****	*****	*****	*****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ

**DSN 001S: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Toxicity, Ceriodaphnia Chronic (61426) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	Semi-Annually	Composite	All Months	WQBEL
Toxicity, Pimephales Chronic (61428) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	Semi-Annually	Composite	All Months	WQBEL

**DSN 001Y: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Cyanide, Total (As CN) (00720) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	BPJ
Chromium, Total (As Cr) (01034) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	BPJ
Copper, Total (As Cu) (01042) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	BPJ
Lead, Total (As Pb) (01051) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	BPJ
Nickel, Total (As Ni) (01067) Effluent Gross Value	*****	(Report) Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	BPJ

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Zinc, Total (As Zn) (01092) Effluent Gross Value	****	(Report) Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	BPJ
Carbon Tetrachloride (32102) Effluent Gross Value	0.0001 Monthly Average	0.0001 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
1,2-Dichloroethane (32103) Effluent Gross Value	0.0023 Monthly Average	0.0023 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
Chloroform (32106) Effluent Gross Value	0.0023 Monthly Average	0.0049 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Toluene (34010) Effluent Gross Value	0.002 Monthly Average	0.004 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Benzene (34030) Effluent Gross Value	0.0017 Monthly Average	0.0017 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
Acenaphthylene (34200) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Acenaphthene (34205) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Acrylonitrile (34215) Effluent Gross Value	0.000015 Monthly Average	0.000015 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
Anthracene (34220) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Benzo (K) Fluoranthene (34242) Effluent Gross Value	0.000001 Monthly Average	0.000001 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
Benzo (A) Pyrene (34247) Effluent Gross Value	0.000001 Monthly Average	0.000001 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
Chlorobenzene (34301) Effluent Gross Value	0.0016 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Chrysene (34320) Effluent Gross Value	0.000001 Monthly Average	0.000001 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Diethyl Phthalate (34336) Effluent Gross Value	0.0030 Monthly Average	0.0060 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Dimethyl Phthalate (34341) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Ethylbenzene (34371) Effluent Gross Value	0.0034 Monthly Average	0.0116 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Fluoranthene (34376) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Fluorene (34381) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	EGL
Hexachlorobutadiene (34391) Effluent Gross Value	0.0012 Monthly Average	0.0012 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
Hexachloroethane (34396) Effluent Gross Value	0.00025 Monthly Average	0.00025 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Methyl Chloride (34418) Effluent Gross Value	0.006 Monthly Average	0.016 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding
Methylene Chloride (34423) Effluent Gross Value	0.002 Monthly Average	0.009 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti- Backsliding

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
	Monthly Average	Maximum Daily		****	****	****					
Nitrobenzene (34447) Effluent Gross Value	0.0029 Monthly Average	0.0073 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
Phenanthrene (34461) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Pyrene (34469) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Tetrachloroethylene (34475) Effluent Gross Value	0.0002 Monthly Average	0.0002 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
1,1-Dichloroethane (34496) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,1-Dichloroethylene (34501) Effluent Gross Value	0.0012 Monthly Average	0.0033 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,1,1-Trichloroethane (34506) Effluent Gross Value	0.0012 Monthly Average	0.0033 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,1,2-Trichloroethane (34511) Effluent Gross Value	0.0010 Monthly Average	0.0010 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
Benzo (A) Anthracene (34526) Effluent Gross Value	0.000001 Monthly Average	0.000001 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
1,2-Dichlorobenzene (34536) Effluent Gross Value	0.0083 Monthly Average	0.0175 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,2-Dichloropropane (34541) Effluent Gross Value	0.000912 Monthly Average	0.000912 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
1,2-Trans-Dichloroethylene (34546) Effluent Gross Value	0.0014 Monthly Average	0.0037 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,2,4-Trichlorobenzene (34551) Effluent Gross Value	0.0044 Monthly Average	0.0044 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	WQBEL
1,3-Dichlorobenzene (34566) Effluent Gross Value	0.0033 Monthly Average	0.0047 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,4-Dichlorobenzene (34571) Effluent Gross Value	0.0016 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
2-Chlorophenol (34586) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	EGL
2-Nitrophenol (34591) Effluent Gross Value	0.004 Monthly Average	0.0074 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
2,4-Dichlorophenol (34601) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	EGL
2,4-Dimethylphenol (34606) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
2,4-Dinitrotoluene (34611) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	EGL
2,4-Dinitrophenol (34616) Effluent Gross Value	0.0076 Monthly Average	0.0132 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
2,6-Dinitrotoluene (34626) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	EGL
4-Nitrophenol (34646) Effluent Gross Value	0.0077 Monthly Average	0.0133 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
	Monthly Average	Maximum Daily		*****	*****	*****					
4,6-Dinitro-O-Cresol (34657) Effluent Gross Value	0.0043 Monthly Average	0.0154 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
Phenol, Single Compound (34694) Effluent Gross Value	0.0011 Monthly Average	0.0026 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
Naphthalene (34696) Effluent Gross Value	0.001 Monthly Average	0.003 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	EGL
Bis (2-Ethylhexyl) Phthalate (39100) Effluent Gross Value	0.000138 Monthly Average	0.000138 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	WQBEL
Di-N-Butyl Phthalate (39110) Effluent Gross Value	0.001 Monthly Average	0.002 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
Vinyl Chloride (39175) Effluent Gross Value	0.0002 Monthly Average	0.0002 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	WQBEL
Trichloroethylene (39180) Effluent Gross Value	0.0010 Monthly Average	0.0019 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding/ WQBEL
Hexachlorobenzene (39700) Effluent Gross Value	0.0000002 Monthly Average	0.0000002 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	WQBEL
1,3 Dichloropropene (77163) Effluent Gross Value	0.0013 Monthly Average	0.0013 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	WQBEL
3,4 Benzofluoranthene (79531) Effluent Gross Value	0.000001 Monthly Average	0.000001 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	WQBEL
Chloroethane (85811) Effluent Gross Value	0.006 Monthly Average	0.016 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding

**DSN 0021: Once-through Non-Contact Cooling Water**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Temperature, Water Deg. Fahrenheit (00011) Effluent Gross Value	****	****	****	****	****	90 Maximum Daily	deg F	Monthly	Grab	All Months	WQBEL
pH (00400) Effluent Gross Value	****	****	****	6.0 Minimum Daily	****	8.5 Maximum Daily	S.U.	Monthly	Grab	All Months	WQBEL
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	****	****	****	****	Monthly	Instantaneous	All Months	BPJ
Chlorine, Total Residual (50060) Effluent Gross Value	****	****	****	****	0.011 Monthly Average	0.019 Maximum Daily	mg/l	Monthly	Grab	All Months	WQBEL

**DSN 003S: Stormwater runoff commingled with air conditioner condensate and fire testing water.**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	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
Solids, Total Suspended (00530) Effluent Gross Value	****	****	****	****	****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Oil & Grease (00556) Effluent Gross Value	****	****	****	****	****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Nitrogen, Total (As N) (00600) Effluent Gross Value	****	****	****	****	****	(Report) Maximum Daily	mg/l	Semi-Annually	Grab	All Months	BPJ
Carbon, Tot Organic (TOC) (00680) Effluent Gross Value	****	****	****	****	****	(Report) 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

**DSN 0041: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	****	****	****	2.0 Minimum Daily	****	****	mg/l	Weekly	Grab	All Months	WQM
pH (00400) Effluent Gross Value	****	****	****	6.0 Minimum Daily	****	8.5 Maximum Daily	S.U.	Weekly	Grab	All Months	WQBEL
Solids, Total Suspended (00530) Effluent Gross Value	4.3 Monthly Average	13.0 Maximum Daily	lbs/day	****	****	****	****	Weekly	Composite	All Months	EGL
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	****	****	****	****	20.0 Monthly Average	30.0 Maximum Daily	mg/l	Weekly	Composite	All Months	WQM
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	****	****	****	****	Daily	Totalizer	All Months	BPJ
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	3.22 Monthly Average	5.38 Maximum Daily	lbs/day	****	****	****	****	Weekly	Composite	All Months	WQM/ ELG

**DSN 004P: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Perfluorooctanoic Acid (51521) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluorobutanoic Acid (51522) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluorooctanesulfonamide (51525) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluoropentanoic Acid (51623) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluorohexanoic Acid (51624) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluoroheptanoic Acid (51625) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluorononanoic acid (51626) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluorodecanoic Acid (51627) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ
Perfluoroundecanoic Acid (51628) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi- Annually	Grab	All Months	BPJ

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Perfluorododecanoic acid (51629) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorotridecanoic Acid (51630) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorotetradecanoic Acid (51631) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
N-ethyl perfluorooctanesulfonamidoethanol (51641) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
N-methyl perfluorooctanesulfonamidoethanol (51642) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
2-(N-ethyl-PFOA) acetic acid (51643) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
2-(N-methyl-PFOA) acetic acid (51644) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
3-Perfluoroheptyl propanoic acid (PF005) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (PF004) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (PF003) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoro-3-methoxypropanoic acid (PF002) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
3-Perfluoropropyl propanoic acid (PF001) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
N-ethyl perfluorooctanesulfonamide (52642) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
N-methyl perfluorooctanesulfonamide (52641) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
4,8-Dioxa-3H-perfluorononanoic acid (52636) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorododecanesulfonic acid (52632) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoro(2-ethoxyethane)sulfonic acid (52629) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Nonafluoro-3,6-dioxaheptanoic acid (52626) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorohexanesulfonic acid (52605) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorononanesulfonic acid (52611) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoropentanesulfonic acid (52610) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (52609) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (52608) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (52607) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorooctanesulfonic acid (52606) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoro-4-methoxybutanoic acid (PF006) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluoroheptanesulfonic acid (52604) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorodecanesulfonic acid (52603) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
Perfluorobutanesulfonic acid (52602) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ



Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Hexafluoropropylene oxide dimer acid (52612) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ
2H,2H,3H,3H-Perfluorooctanoic acid (PF007) Effluent Gross Value	****	****	****	****	****	(Report) Single Sample	ng/l	Semi-Annually	Grab	All Months	BPJ

**DSN 004S: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

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

**DSN 004Y: Treated Process Water, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
Cyanide, Total (As CN) (00720) Effluent Gross Value	****	(Report) Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Chromium, Total (As Cr) (01034) Effluent Gross Value	****	(Report) Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Copper, Total (As Cu) (01042) Effluent Gross Value	****	(Report) Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Lead, Total (As Pb) (01051) Effluent Gross Value	****	(Report) Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Nickel, Total (As Ni) (01067) Effluent Gross Value	****	(Report) Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Zinc, Total (As Zn) (01092) Effluent Gross Value	****	(Report) Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Carbon Tetrachloride (32102) Effluent Gross Value	0.0080 Monthly Average	0.021 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,2-Dichloroethane (32103) Effluent Gross Value	0.0100 Monthly Average	0.0320 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Chloroform (32106) Effluent Gross Value	0.0060 Monthly Average	0.0180 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Toluene (34010) Effluent Gross Value	0.0020 Monthly Average	0.0040 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
	Monthly Average	Maximum Daily		****	****	****					
Benzene (34030) Effluent Gross Value	0.0030 Monthly Average	0.0070 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Acenaphthylene (34200) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Acenaphthene (34205) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Acrylonitrile (34215) Effluent Gross Value	0.0050 Monthly Average	0.0130 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Anthracene (34220) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Benzo (K) Fluoranthene (34242) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Benzo (A) Pyrene (34247) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Chlorobenzene (34301) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Chrysene (34320) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Diethyl Phthalate (34336) Effluent Gross Value	0.0030 Monthly Average	0.0060 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Dimethyl Phthalate (34341) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Ethylbenzene (34371) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Fluoranthene (34376) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Fluorene (34381) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Hexachlorobutadiene (34391) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Hexachloroethane (34396) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Methyl Chloride (34418) Effluent Gross Value	0.0060 Monthly Average	0.0160 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Methylene Chloride (34423) Effluent Gross Value	0.0020 Monthly Average	0.0090 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Nitrobenzene (34447) Effluent Gross Value	0.1240 Monthly Average	0.3560 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Phenanthrene (34461) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Pyrene (34469) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Tetrachloroethylene (34475) Effluent Gross Value	0.0030 Monthly Average	0.0090 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,1-Dichloroethane (34496) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
	Monthly Average	Maximum Daily		****	****	****					
1,1-Dichloroethylene (34501) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,1,1-Trichloroethane (34506) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,1,2-Trichloroethane (34511) Effluent Gross Value	0.0020 Monthly Average	0.0070 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Benzo (A) Anthracene (34526) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,2-Dichlorobenzene (34536) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,2-Dichloropropane (34541) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,2-Trans-Dichloroethylene (34546) Effluent Gross Value	0.0010 Monthly Average	0.0040 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,2,4-Trichlorobenzene (34551) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,3-Dichlorobenzene (34566) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
1,4-Dichlorobenzene (34571) Effluent Gross Value	0.0080 Monthly Average	0.0210 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
2-Chlorophenol (34586) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	ELG
2-Nitrophenol (34591) Effluent Gross Value	0.0040 Monthly Average	0.0130 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
2,4-Dichlorophenol (34601) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	ELG
2,4-Dimethylphenol (34606) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
2,4-Dinitrotoluene (34611) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	ELG
2,4-Dinitrophenol (34616) Effluent Gross Value	0.0670 Monthly Average	0.2380 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
2,6-Dinitrotoluene (34626) Effluent Gross Value	0.0000 Monthly Average	0.0000 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	ELG
4-Nitrophenol (34646) Effluent Gross Value	0.0090 Monthly Average	0.0320 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
4,6-Dinitro-O-Cresol (34657) Effluent Gross Value	0.0040 Monthly Average	0.0150 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Phenol, Single Compound (34694) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Naphthalene (34696) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding
Bis (2-Ethylhexyl) Phthalate (39100) Effluent Gross Value	0.0050 Monthly Average	0.0140 Maximum Daily	lbs/day	****	****	****	****	Annually	Grab	All Months	Anti-Backsliding

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq	Sample Type	Seasonal	Basis
	Monthly Average	Maximum Daily		*****	*****	*****					
Di-N-Butyl Phthalate (39110) Effluent Gross Value	0.0010 Monthly Average	0.0020 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
Vinyl Chloride (39175) Effluent Gross Value	0.0050 Monthly Average	0.0100 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
Trichloroethylene (39180) Effluent Gross Value	0.0010 Monthly Average	0.0040 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
Hexachlorobenzene (39700) Effluent Gross Value	0.0017 Monthly Average	0.0017 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
1,3 Dichloropropene (77163) Effluent Gross Value	0.0110 Monthly Average	0.0440 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
3,4 Benzofluoranthene (79531) Effluent Gross Value	0.0010 Monthly Average	0.0030 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding
Chloroethane (85811) Effluent Gross Value	0.0060 Monthly Average	0.0160 Maximum Daily	lbs/day	*****	*****	*****	*****	Annually	Grab	All Months	Anti-Backsliding

\*Basis for Permit Limitation

- BPJ – Best Professional Judgment
- WQBEL – Water Quality Based Effluent Limits
- Anti-backsliding – Anti-backsliding
- EGL – Federal Effluent Guideline Limitations
- WQM – Waste Load Allocation Quality Modeling

**Discussion**

The parameters of concern for this facility are based on the parameters of concern listed in the permit application, the current permit, federal effluent guideline limitations, and based upon best professional judgment (BPJ). These parameters are consistent with similar facilities in the state and have been proven to be reflective of the operations at this facility. The proposed frequencies are based on a review of site specific conditions and an evaluation of similar facilities.

**DSN001– Treated process wastewater, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to an U.T. to Prestwood Creek.**

**Federal Effluent Guideline Limitations (EGL)**

Parameters based upon EGL have had effluent guidelines established under 40 CFR 414.51 (Subpart E – Thermosetting Resins), 414.61 (Subpart F – Commodity Organic Chemicals), and 414.101 (Subpart J – Direct Discharge Point Sources That Do Not Use End-of-Pipe Biological Treatment).

**OCPSF Guideline Parameters**

Attached to this rationale are the OCPSF calculations for the discharge to a UT to Prestwood Creek, which show the calculations of the guideline-based OCPSF parameters and their comparisons to the calculated water quality-based parameters. The parameters for this facility are specifically based on 40 CFR 414.51 (Subpart E – Thermosetting Resins), 414.61 (Subpart F – Commodity Organic Chemicals), and 414.101 (Subpart J – Direct Discharge Point Sources That Do Not Use End-of-Pipe Biological Treatment).

In cases where the water quality human health standards are more stringent than effluent guidelines, the limitation shall be applied as both the daily maximum and monthly average based on Best Professional Judgment (BPJ). In cases where the previous permit limits are more stringent, they remain unchanged as a continuation of the existing limitations due to Anti-backsliding. All metals requirements will continue at annual monitoring because the facility does not have a metal-bearing waste stream and there was no reasonable potential for these metals to be present.

**CBOD, TSS, Ammonia as Nitrogen, and Dissolved Oxygen**

The following is a summary of the existing mass limits, OCPSF guideline-based, and recommended effluent limitations from the May, 2007 waste load allocation (see attached) from a water quality model performed by the ADEM Water Quality Section. The permit limitations shall be based on the more stringent of the existing limits, waste load allocation, and the updated OCPSF guideline-based calculations. Existing limitations for TSS, Ammonia as Nitrogen, and Dissolved Oxygen will continue in this reissuance due to Anti-backsliding. The waste load allocation limit is most stringent for CBOD, the proposed limits are a Daily Max of 4.03 ppd and a Monthly Avg of 2.69 ppd.

Parameter	2007 Waste Load Allocation			Existing Mass Limit	
	Daily Min (mg/L)	Daily Max (mg/L)	Monthly Avg (mg/L)	Monthly Avg (ppd)	Daily Max (ppd)
BOD	-	37.5	25.0	7.36	3.31
NH3-N	-	3.3	2.2	-	-
DO	5.5	-	-	-	-
TSS	-	-	-	8.66	3.48

\*The daily maximums for BOD and Ammonia as Nitrogen were calculated by multiplying the monthly average by 1.5 based on BPJ.

Parameter	2007 Waste Load Allocation			OCPSF ELG		2007 Waste Load Allocation			OCPSF ELG	
	Daily Min (mg/L)	Daily Max (mg/L)	Monthly Avg (mg/L)	Daily Max (mg/L)	Monthly Avg (mg/L)	Daily Min (ppd)	Daily Max (ppd)	Monthly Avg (ppd)	Monthly Avg (ppd)	Daily Max (ppd)
CBOD	-	37.5	25	80	30	-	4.03	2.69	8.59	3.22

NH3-N	-	3.3	2.2	-	-	-	0.35	0.24	-	-
DO	5.5	-	-	-	-	0.59	-	-	-	-
TSS	-	-	-	149	46	-	-	-	16.00	4.94
		*Avg flow:		12871	gal	conversion factor:		8.345E-06	lb/gal/mg/L	

### **Water Quality Based Effluent Limits (WOBEL)**

#### **pH**

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(5)(e)(2) – Specific Water Quality for Fish & Wildlife 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.” Therefore, weekly pH monitoring is required for this outfall and shall not deviate from a range of 6.0 to 8.5 s.u.

#### **Chlorine, Total Residual**

EPA’s recommended water quality criteria for total residual chlorine (TRC) of 0.019 mg/l for acute toxicity and 0.011 for chronic toxicity is being required as the daily maximum and monthly average values for this discharge. In-stream standard compliance for total residual chlorine is required because of the high flow of the discharge compared to the receiving stream 7Q<sub>10</sub> of 0.0 cfs. In accordance with a letter dated August 11, 1998 from EPA Headquarters and a 1991 memorandum from EPA Region 4’s Environmental Services Division (ESD), due to testing and method detection limitations, a Total Residual Chlorine measurement below 0.05 mg/L shall be considered below detection for compliance purposes. Monitoring is proposed to continue at once per month.

#### **Reasonable Potential Analysis**

The Department completed a reasonable potential analysis (RPA) (see attached) of the discharge based on laboratory data provided in the Permittee’s application. The RPA indicates whether pollutants in treated effluent have the potential to contribute to excursions of Alabama’s in-stream water quality standards. Based on the analytical data submitted by the facility, it appears that there is a reasonable potential and resulting limitation for Total Recoverable Arsenic, Total Recoverable Copper, and Bromoform for the discharge to the Unnamed Tributary to Prestwood Creek.

#### **Lead, and Zinc**

Total recoverable lead and total recoverable zinc, it appears there is no reasonable potential, however since these metals are present in the analytical data, monitoring requirement is being proposed for this reissuance.

#### **Chronic Toxicity Biomonitoring**

In view of the potential toxicity of the wastewater from synergistic effects, Chronic Toxicity Biomonitoring is required for this discharge. The Chronic test is appropriate in consideration of the F&W stream classification and because the effluent flow is more than 1% of the 7Q<sub>10</sub> of the receiving stream with no diffuser. Testing will be conducted at an In-Stream Waste Concentration (IWC) of 100 %. The IWC was determined using an assumed complete mix because the receiving stream 7Q<sub>10</sub> is 0.0 cfs. The monitoring frequency is proposed to continue at once per six months.

### **Best Professional Judgment (BPJ)**

The parameters of concern developed on BPJ for this facility are based on the parameters of concern listed in the permit application and from the current permit. These parameters are consistent with similar facilities in the state and have been proven to be reflective of the operations at this facility.

#### **Flow**

Flow monitoring shall continue at monthly instantaneous readings with no limitations imposed.

## **DSN002– Once-through Non-Contact Cooling Water**

### **Best Professional Judgment (BPJ)**

The parameters of concern developed on BPJ for this facility are based on the parameters of concern listed in the permit application and from the current permit. These parameters are consistent with similar facilities in the state and have been proven to be reflective of the operations at this facility.

#### **Flow**

Flow monitoring shall continue at monthly instantaneous readings with no limitations imposed.

### **Water Quality Based Effluent Limits (WOBEL)**

#### **pH**

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(5)(e)(2) – Specific Water Quality for Fish & Wildlife 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.” Therefore, weekly pH monitoring is required for this outfall and shall not deviate from a range of 6.0 to 8.5 s.u.

#### **Temperature**

The ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(4)(e)3(i)-Specific Water Quality Criteria for Fish & Wildlife classified streams states: “The maximum temperature in streams, lakes and reservoirs other than those listed in subparagraph (ii) hereof, shall not exceed 90°F. Therefore, temperature limitations are proposed at 90°F for this outfall.

#### **Chlorine, Total Residual**

EPA’s recommended water quality criteria for total residual chlorine of 0.019 mg/l for acute toxicity and 0.011 for chronic toxicity is being used as the daily maximum and monthly average values for discharges into zero flow streams. In accordance with a letter dated August 11, 1998 from EPA Headquarters and a 1991 memorandum from EPA Region 4’s Environmental Services Division (ESD), due to testing and method detection limitations, a Total Residual Chlorine measurement below 0.05 mg/L shall be considered below detection for compliance purposes.

## **DSN003–Stormwater runoff commingled with air conditioner condensate and fire testing water.**

### **Best Professional Judgment (BPJ)**

The parameters of concern developed on BPJ for this facility are based on the parameters of concern listed in the permit application and from the current permit. These parameters are consistent with similar facilities in the state and have been proven to be reflective of the operations at this facility.

#### **Flow**

Flow monitoring shall be at semi-annual estimated readings with no limitations imposed.

#### **Additional Parameters**

Total Suspended Solids (TSS), total nitrogen, total organic carbon, oil and grease, and BOD shall be monitored on a semi-annual basis as a measure of BMP effectiveness.

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.

**DSN004– Treated process wastewater, boiler blowdown, steam condensate, demineralizer rinse, non-contact cooling water, cooling tower blowdown, and stormwater discharging to the Conecuh River.**

**Federal Effluent Guideline Limitations (EGL)**

Parameters based upon EGL have had effluent guidelines established under 40 CFR 414.51 (Subpart E – Thermosetting Resins), 414.61 (Subpart F – Commodity Organic Chemicals), and 414.101 (Subpart J – Direct Discharge Point Sources That Do Not Use End-of-Pipe Biological Treatment).

**OCPSF Guideline Parameters**

Attached to this rationale are the OCPSF calculations for the discharge to the Conecuh River which shows the calculations of the guideline-based OCPSF parameters and their comparisons to the calculated water quality based parameters. The parameters for this facility are specifically based on 40 CFR 414.51 (Subpart E – Thermosetting Resins), 414.61 (Subpart F – Commodity Organic Chemicals), and 414.101 (Subpart J – Direct Discharge Point Sources That Do Not Use End-of-Pipe Biological Treatment).

Upon comparison with the previous permit limits, the previous permit limits are more stringent. Therefore, the existing permit limits for OCPSF guideline parameters will be continued in this re-issuance due to Anti-backsliding. All metals requirements will continue at annual monitoring because the facility does not have a metal-bearing waste stream and there was no reasonable potential for these metals present.

**2-Chlorophenol, 2,4-Dichlorophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene**

Upon comparing the OCPSF spreadsheet with the existing permit's OCPSF parameters, it was noted that the parameters for 2-Chlorophenol, 2,4-Dichlorophenol, 2,4-Dinitrotoluene, and 2,6-Dinitrotoluene were missing. Therefore, they have been added in this reissuance. However, unlike other OCPSF parameters, these were not included in the previous permit limit, so they could not be applied under the anti-backsliding, therefore, the permit limit was set based on the newly calculated OCPSF limit.

**CBOD, Ammonia as Nitrogen, and Dissolved Oxygen**

The following is a summary of the existing mass limits, OCPSF guideline-based, and recommended effluent limitations from the November, 2023 waste load allocation (see attached) from a water quality model performed by the ADEM Water Quality Section. The permit limitations shall be based on the more stringent of the existing limits, waste load allocation, and the updated OCPSF guideline-based calculations. Existing limitations for TSS, Ammonia as Nitrogen, and Dissolved Oxygen will continue in this reissuance due to Anti-backsliding. The waste load allocation sets a stringent Daily Max limit for CBOD at 5.38 ppd. The OCPSF guideline-based calculation proposes a Monthly Avg limit for CBOD, which is most stringent at 3.22 ppd.

Parameter	Existing Limit (2012 Waste Load Allocation)			Existing Mass Limit	
	Daily Min (mg/L)	Daily Max (mg/L)	Monthly Avg (mg/L)	Monthly Avg (ppd)	Daily Max (ppd)
CBOD	-	37.5	25	7.81	3.89
NH3-N	-	30	20	-	-
DO	2	-	-	-	-
TSS	-	-	-	13.0	4.32

Parameter	New Waste Load Allocation			OCPSF ELG		New Waste Load Allocation			OCPSF ELG	
	Daily Min (mg/L)	Daily Max (mg/L)	Monthly Avg (mg/L)	Daily Max (mg/L)	Monthly Avg (mg/L)	Daily Min (ppd)	Daily Max (ppd)	Monthly Avg (ppd)	Monthly Avg (ppd)	Daily Max (ppd)
CBOD	-	50.1	33.4	80	30	-	5.38	3.59	8.59	3.22
NH3-N	-	30	20	-	-	-	3.22	2.15	-	-



DO	2	-	-	-	-	0.21	-	-	-	-
TSS	-	-	-	149	46	-	-	-	16.00	4.94

\*Avg flow: 12871 gal      conversion factor: 8.345E-06 lb/gal/mg/L

**Water Quality Based Effluent Limits (WQBEL)**

**pH**

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(5)(e)(2) – Specific Water Quality for Fish & Wildlife 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.” Therefore, weekly pH monitoring is required for this outfall and shall not deviate from a range of 6.0 to 8.5 s.u.

**Acute Toxicity Biomonitoring**

The receiving stream for DSN004 is the Conecuh River. In view of the increased dilution, acute toxicity will be required at this outfall. In view of the potential toxicity of the wastewater from synergistic effects, 48-hr acute biomonitoring at this facility shall occur once per six months with a 10% mortality limitation. The Acute test is appropriate in consideration of the F&W stream classification and because the effluent flow is less than 1% of the 7Q10 of the receiving stream. Testing will be conducted using undiluted effluent which is consistent with other facilities with no diffuser.

**Reasonable Potential Analysis**

The Department completed a reasonable potential analysis (RPA) of the discharge based on laboratory data provided in the Permittee’s application (see attached). The RPA indicates whether pollutants in treated effluent have the potential to contribute to excursions of Alabama’s in-stream water quality standards. Based on the analytical data submitted by the facility, it appears that there is no reasonable potential for the discharge to the Conecuh River

**316(b) Cooling Water Intake Structure**

The Department has determined that the entity providing water to the Permittee is a public water system in accordance with Section 1401 of the Safe Drinking Water Act; therefore, the Permittee is exempt from the requirements of Section 316(b) of the federal Clean Water Act (33 U.S.C. section 1326) and rules adopted under this section.

**Per- and Polyfluoroalkyl Substances (PFAS)**

Based upon the Department’s review of this facility the Department has determined that it is appropriate to include PFAS monitoring in the permit to obtain more comprehensive monitoring information on potential sources of PFAS. EPA has indicated that they are developing effluent guidelines, analytical methods, and establishing recommended water quality criteria for PFAS.

Unless indicated by other information, the Department has determined that it is appropriate to establish PFAS monitoring on process discharges from the following industry sectors: organic chemicals, plastics & synthetic fibers (OCPSF); metal finishing; electroplating; electric and electronic components; landfills which require an NPDES or SID permit; leather tanning & finishing; plastics molding & forming; textile mills; paint formulating, and centralized waste treatment units.

$Q_{d1} * C_{d1} + Q_{d2} * C_{d2} + Q_{d3} * C_{d3} = Q * C_r$								Enter Max Daily	Enter Avg Daily	Partition Coefficient (Stream / Lake)
ID	Pollutant	Carcinogen "Yes"	Type	Background from upstream source (C <sub>d1</sub> ) Daily Max	Background from upstream source (C <sub>d2</sub> ) Monthly Ave	Background Instream (C <sub>d3</sub> ) Daily	Background Instream (C <sub>d3</sub> ) Monthly Ave	Discharge as reported by Applicant (C <sub>d</sub> ) Max	Discharge as reported by Applicant (C <sub>d</sub> ) Ave	
				µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
1	Antimony		Metals	0	0	0	0	0	0	-
2	Arsenic**	YES	Metals	0	0	0	0	41.2	41.2	0.574
3	Barium		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	15	15	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	-
7	Copper**		Metals	0	0	0	0	28.7	28.7	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.206
9	Mercury**		Metals	0	0	0	0	0	0	0.302
10	Nickel**		Metals	0	0	0	0	0	0	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	24	24	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	17.6	17.6	-
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	Chlorobromo-Methane*	YES	VOC	0	0	0	0	1.1	1.1	-
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	TributylBee (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	4-Chlorophenol		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		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	Acequinaphthene		Bases	0	0	0	0	0	0	-
68	Acequinaphthylene		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(C)Perylene		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-Chloroethyl)-Ether*	YES	Bases	0	0	0	0	0	0	-
78	Bis (2-Chloroisopropyl) 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	D-N-Butyl Phthalate		Bases	0	0	0	0	0	0	-
86	D-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	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	-

0.014	Enter Q <sub>1</sub> = wastewater discharge flow from facility (MGD)
0.02166121	Q <sub>d</sub> = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Q <sub>d2</sub> = background stream flow in MGD above point of discharge
0	Q <sub>d2</sub> = background stream flow from upstream source (cfs)
0.0000	Enter 7Q10, Q <sub>s</sub> = background stream flow in cfs above point of discharge
0.0000	Enter or estimated, 1Q10, Q <sub>s</sub> = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
0.0000	Enter Mean Annual Flow, Q <sub>s</sub> = background stream flow in cfs above point of discharge
0.00	Enter 7Q2, Q <sub>s</sub> = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Left	Enter C <sub>r</sub> = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q <sub>d</sub> + Q <sub>d2</sub> + Q <sub>d3</sub>	Q <sub>d</sub> = resultant in-stream flow after discharge
Calculated on other	C <sub>r</sub> = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
50.00	Enter Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.00 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

March 28, 2024

Freshwater F&W classification:	Freshwater F&W classification:		Max Daily Discharge as reported by Applicant (C <sub>max</sub> )	Freshwater Acute (µg/l) C <sub>a</sub> = 10:10				Avg Daily Discharge as reported by Applicant (C <sub>avg</sub> )	Freshwater Chronic (µg/l) C <sub>c</sub> = 70:10				Human Health Consumption Fish only (µg/l) Carcinogen C <sub>h</sub> = Annual Average Non-Carcinogen C <sub>h</sub> = 70:10				
	ID	Pollutant		RP?	Water Quality Criteria (C <sub>1</sub> )	Draft Permit Limit (C <sub>max</sub> )	20% of Draft Permit Limit		RP?	Water Quality Criteria (C <sub>1</sub> )	Draft Permit Limit (C <sub>max</sub> )	20% of Draft Permit Limit	RP?	Water Quality Criteria (C <sub>1</sub> )	Draft Permit Limit (C <sub>max</sub> )	20% of Draft Permit Limit	RP?
1	Antimony		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Arsenic	YES	41.2	567,134	592,334	118,467	No	41.2	299,938	291,324	52,265	No	0.3030	0.3030	0.0606	Yes	
3	Beryllium		0	0	0	0	No	0	0	0	0	0	0	0	0	0	
4	Cadmium		0	0	4,347	0.869	No	0	0	0.644	0.129	No	0	0	0	0	
5	Chromium/ Chromium III		0	15	183,398	1537,913	307,583	No	15	200,051	40,010	No	0	0	0	0	
6	Chromium/ Chromium VI		0	0	16,000	3,200	No	0	11,600	11,000	2,200	No	0	0	0	0	
7	Copper	YES	0	26.7	18,026	3,605	Yes	26.7	12,768	12,768	2,553	Yes	4.24E-02	4.24E-02	8.48E-03	No	
8	Lead		0	0	146,291	29,258	No	0	8,791	5,701	1,140	No	0	0	0	0	
9	Mercury		0	0	2,400	0.480	No	0	0.012	0.012	0.002	No	4.24E-02	4.24E-02	8.48E-03	No	
10	Nickel		0	0	515,824	103,165	No	0	97,562	57,292	11,458	No	9.93E+02	9.93E+02	1.98E+02	No	
11	Selenium		0	0	20,000	4,000	No	0	9,600	5,000	1,000	No	10.00E+01	2430.58	486.11	No	
12	Silver		0	0	0.976	0.195	No	0	0	0	0	No	0	0	0	0	
13	Thallium		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
14	Zinc		0	24	197,359	39,474	No	24	109,983	109,983	30,797	No	1.49E+04	1.49E+04	2.98E+03	No	
15	Cyanide		0	0	22,000	4,400	No	0	8,800	5,200	1,040	No	8.33E+03	9.33E+03	1.87E+03	No	
16	Total Phenolic Compounds		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
17	Hardness (As CaCO3)		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
18	Acrolein		0	0	0	0	No	0	0	0	0	No	5.43E+00	5.43E+00	1.09E+00	No	
19	Acrylonitrile	YES	0	0	0	0	No	0	0	0	0	No	1.44E-01	1.44E-01	2.88E-02	No	
20	Aldrin	YES	0	0	3,000	0.600	No	0	0	0	0	No	2.94E-05	5.88E-06	1.18E-06	No	
21	Benzene	YES	0	0	0	0	No	0	0	0	0	No	1.95E+01	3.09E+00	6.18E-01	No	
22	Bromoform	YES	0	17.8	0	0	No	0	0	0	0	No	2.88E+01	1.59E+01	3.18E+00	Yes	
23	Carbon Tetrachloride	YES	0	0	0	0	No	0	0	0	0	No	9.57E-01	1.91E-01	3.82E-02	No	
24	Chlordane	YES	0	0	2,400	0.480	No	0	0	0.004	0.001	No	4.73E-04	4.73E-04	9.46E-05	No	
25	Chlorobenzene		0	0	0	0	No	0	0	0	0	No	9.08E+02	1.81E+02	3.62E+01	No	
26	Chlorobromo-Methane	YES	0	1.1	0	0	No	0	0	0	0	No	7.41E+00	7.41E+00	1.48E+00	No	
27	Chloroethane		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
28	2-Chloro-Ethylvinyl Ether		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
29	Chloroform		0	0	0	0	No	0	0	0	0	No	1.02E+02	2.04E+01	4.08E+00	No	
30	4,4'-DDD	YES	0	0	0	0	No	0	0	0	0	No	1.81E-04	3.63E-05	7.26E-06	No	
31	4,4'-DDE	YES	0	0	0	0	No	0	0	0	0	No	2.38E-04	4.76E-05	9.52E-06	No	
32	4,4'-DDT	YES	0	0	1,100	0.220	No	0	0.001	0.001	0.000	No	1.28E-04	2.56E-05	5.12E-06	No	
33	Dichloro-Methane	YES	0	0	0	0	No	0	0	0	0	No	1.00E+01	2.01E+00	4.02E+00	No	
34	1,1-Dichloroethane		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
35	1,2-Dichloroethane	YES	0	0	0	0	No	0	0	0	0	No	2.14E+01	4.27E+00	8.54E+00	No	
36	Trans-1, 2-Dichloro-Ethylene		0	0	0	0	No	0	0	0	0	No	5.91E+03	1.18E+03	2.36E+02	No	
37	1,1-Dichloroethylene	YES	0	0	0	0	No	0	0	0	0	No	4.17E+03	8.33E+02	1.67E+02	No	
38	1,2-Dichloropropane		0	0	0	0	No	0	0	0	0	No	8.49E+00	1.70E+00	3.40E+00	No	
39	1,3-Dichloro-Propylene		0	0	0	0	No	0	0	0	0	No	1.23E+01	2.46E+00	4.92E+00	No	
40	Dieldrin	YES	0	0	0.240	0.048	No	0	0.056	0.056	0.011	No	3.12E-05	6.25E-06	1.25E-06	No	
41	Ethylbenzene		0	0	0	0	No	0	0	0	0	No	1.24E+03	2.49E+02	4.98E+01	No	
42	Methyl Bromide		0	0	0	0	No	0	0	0	0	No	8.71E+02	1.74E+02	3.49E+01	No	
43	Methyl Chloride		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
44	Methylene Chloride	YES	0	0	0	0	No	0	0	0	0	No	3.46E+02	6.91E+01	1.38E+01	No	
45	1, 1, 2, 2-Tetrachloro-Ethane	YES	0	0	0	0	No	0	0	0	0	No	2.33E+00	4.67E-01	9.34E-02	No	
46	Tetrachloro-Ethylene	YES	0	0	0	0	No	0	0	0	0	No	1.92E+00	3.83E-01	7.66E-02	No	
47	Toluene		0	0	0	0	No	0	0	0	0	No	8.72E+03	1.74E+03	3.49E+02	No	
48	Toxaphene	YES	0	0	0.730	0.146	No	0	0	0.000	0.000	No	1.62E-04	3.24E-05	6.48E-06	No	
49	Tributyltin (TBT)	YES	0	0	0.460	0.092	No	0	0.072	0.072	0.014	No	0	0	0	0	
50	1, 1, 1-Trichloroethane		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
51	1, 1, 2-Trichloroethane		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
52	Trichloroethylene	YES	0	0	0	0	No	0	0	0	0	No	8.10E+00	1.62E+00	3.24E+00	No	
53	Vinyl Chloride	YES	0	0	0	0	No	0	0	0	0	No	1.75E+01	3.49E+00	6.98E+00	No	
54	p-Chloro-M-Cresol		0	0	0	0	No	0	0	0	0	No	1.42E+00	2.85E-01	5.70E-02	No	
55	2-Chlorophenol		0	0	0	0	No	0	0	0	0	No	8.71E+01	1.74E+01	3.49E+00	No	
56	2, 4-Dichlorophenol		0	0	0	0	No	0	0	0	0	No	1.72E+02	3.44E+01	6.88E+00	No	
57	2, 4-Dimethylphenol		0	0	0	0	No	0	0	0	0	No	4.98E+02	9.96E+01	1.99E+01	No	
58	4-S-Dinitro-Cresol		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
59	4-Dinitrophenol		0	0	0	0	No	0	0	0	0	No	3.11E+03	6.22E+02	1.24E+02	No	
60	6,6-Dinitro-2-methylphenol	YES	0	0	0	0	No	0	0	0	0	No	1.65E+02	3.31E+01	6.62E+00	No	
61	Dioxin (2,3,7,6-TCDD)	YES	0	0	0	0	No	0	0	0	0	No	2.87E-08	5.73E-09	1.15E-09	No	
62	2-Nitrophenol		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
63	4-Nitrophenol		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
64	Pentachlorophenol	YES	0	8.723	1.745	No	0	8.693	8.693	1.339	No	1.77E+00	3.54E-01	7.08E-02	No		
65	Phenol		0	0	0	0	No	0	0	0	0	No	5.00E+05	1.00E+05	2.00E+04	No	
66	2, 4, 6-Trichlorophenol	YES	0	0	0	0	No	0	0	0	0	No	1.41E+00	2.83E-01	5.66E-02	No	
67	Acenaphthene		0	0	0	0	No	0	0	0	0	No	5.79E+02	1.16E+02	2.32E+01	No	
68	Acenaphthylene		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
69	Anthracene		0	0	0	0	No	0	0	0	0	No	2.33E+04	4.67E+03	9.34E+02	No	
70	Benadins		0	0	0	0	No	0	0	0	0	No	1.18E-04	2.32E-05	4.64E-06	No	
71	Benzo(A)Anthracene	YES	0	0	0	0	No	0	0	0	0	No	1.07E-02	2.13E-03	4.26E-04	No	
72	Benzo(A)Pyrene	YES	0	0	0	0	No	0	0	0	0	No	1.07E-02	2.13E-03	4.26E-04	No	
73	Benzo(b)fluoranthene		0	0	0	0	No	0	0	0	0	No	1.07E-02	2.13E-03	4.26E-04	No	
74	Benzo(GH)Perylene		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
75	Benzo(K)Fluoranthene		0	0	0	0	No	0	0	0	0	No	1.07E-02	2.13E-03	4.26E-04	No	
76	Bis (2-Chlorophenoxy) Methane		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
77	Bis (2-Chloroethoxy) Ether	YES	0	0	0	0	No	0	0	0	0	No	3.07E-01	6.15E-02	1.23E-02	No	
78	Bis (2-Chloro-Propyl) Ether		0	0	0	0	No	0	0	0	0	No	3.78E+04	7.56E+03	1.51E+03	No	
79	Bis (2-Ethylhexyl) Phthalate	YES	0	0	0	0	No	0	0	0	0	No	1.28E+00	2.56E-01	5.12E-02	No	
80	4-Bromophenyl Phenyl Ether		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
81	Butyl Benzyl Phthalate		0	0	0	0	No	0	0	0	0	No	1.13E+03	2.26E+02	4.52E+01	No	
82	2-Chloronaphthalene		0	0	0	0	No	0	0	0	0	No	9.24E+02	1.85E+02	3.70E+01	No	
83	4-Chlorophenyl Phenyl Ether		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
84	Chrysene		0	0	0	0	No	0	0	0	0	No	0	0	0	0	
85	Di-N-Butyl Phthalate	YES	0	0	0	0	No	0	0	0	0	No	1.07E-02	2.13E-03	4.26E-04	No	
86	Di-N-Octyl Phthalate		0	0	0	0	No	0	0	0	0	No	2.62E+03	5.24E+02	1.05E+02	No	
87	Dibenz(A,H)Anthracene	YES	0	0	0	0	No	0	0	0	0	No	1.07E-02	2.13E-03	4.26E-04	No	
88	1, 2-Dichlorobenzene		0	0	0	0	No	0	0	0	0	No	7.56E+02	1.51E+02	3.02E+01	No	
89	1, 3-Dichlorobenzene		0	0	0	0	No	0	0	0	0	No	5.82E+02	1.16E+02	2.32E+01	No	
90	1, 4-Dichlorobenzene		0	0	0	0	No	0	0	0	0	No	1.12E+02	2.25E+01	4.50E+00	No	
91	3, 4-Dichlorobenzidine	YES	0	0	0	0	No	0	0	0	0	No	1.69E-02	3.32E-03	6.64E-04	No	
92	Diethyl Phthalate		0	0	0	0	No	0	0	0	0	No	2.55E-04	5.11E-05	1.02E-05	No	
93	Dimethyl Phthalate		0	0	0	0	No	0	0	0	0	No	6.48E+05	1.30E+05	2.60E+04	No	
94	2, 4-Dinitrotoluene	YES															

**OCPSF PERMIT LIMITS CALCULATIONS**

**FACILITY NAME :** Arclin, Inc.

Prepared By: Victoria Kim

**LOCATION :** Andalusia

Prepared Date: November 17, 2023

**NPDES NUMBER :** AL0000868 (Outfall DSN001)

IS THIS A RAYON MANUFACTURING FACILITY THAT USES THE VISCOSE PROCESS OR AN ACRYLIC MANUFACTURER THAT USES THE ZINC CHLORIDE/SOLVENT PROCESS (YES =0, NO =1)				1
DOES THIS FACILITY USE END-OF-PIPE BIOLOGICAL TREATMENT (SUBPART I) (YES =0, NO =1)				1
		ANNUAL PROD. MILLION LBS/YR	PROCESS WASTE FLOW MGD	
OCPSF PRODUCT	SIC CODE			
Subpart B Rayon Fibers		0	0	
Subpart C Other Fibers		0	0	
Subpart D Thermoplastic Resins		0	0	
Subpart E Thermosetting Resins	2821	215.35	0.001677	
Subpart F Commodity Organic Chemic	2869	51.1	0.007752	
Subpart G Bulk Organic		0	0	
Subpart H Specialty Organic		0	0	
OCPSF RELATED FLOWS	TOTAL	266.45	0.009429	
FLOW FROM OTHER SOURCES (e.g. POTWs)			0 MGD	
TOTAL FLOW FROM PROCESS, NON-PROCESS AND OTHER SOURCES			0.012871 MGD	
RECEIVING STREAM 1Q10			0 CFS	
RECEIVING STREAM 7Q10			0 CFS	
RECEIVING STREAM ANNUAL-AVERAGE FLOW			0 CFS	
METAL-BEARING WASTE STREAM VOLUME			0 MGD	
CYANIDE-BEARING WASTE STREAM VOLUME			0 MGD	



	BOD5		TSS	
	Max.	Avg.	Max.	Avg.
Process Total (mg/l)	147.1	55.1	203.2	63.0
Process Total (lb/day)	11.6	4.3	16.0	5.0
Non-process total (lb/day)	0.5/4	0.28/	0.5/4	0.28/
Final Mass Limits (lb/day)	12.1	4.6	16.5	5.2

BA1 Limits are based on 40 CFR 414 Subpart J requirements

PARAMETER	LIMITS		MASS LIMIT		ACUTE	CHRONIC LBS/D	HUMAN HEALTH	
	UG/L		LBS/D				Fish Consumption	Water Consumption
	MAX.	AVG.	MAX.	AVG.				
Acenaphthene	47	19	0.0037	0.0015			0.062100	0.048687
Acenaphthylene	47	19	0.0037	0.0015				
Acrylonitrile*	232	94	0.0182	0.0074			0.000015	0.000005
Anthracene	47	19	0.0037	0.0015			2.504339	0.777320
Benzene *	134	57	0.0105	0.0045			0.001661	0.000120
Benzo(a)anthracene*	47	19	0.0037	0.0015			0.000001	0.000000
3,4-Benzofluoranthene*	48	20	0.0038	0.0016			0.000001	0.000000
Benzo(k)fluoranthene*	47	19	0.0037	0.0015			0.000001	0.000000
Benzo(a)pyrene*	48	20	0.0038	0.0016			0.000001	0.000000
Bis(2-ethylhexyl) phthalate	258	95	0.0203	0.0075			0.000138	0.000091
Carbon Tetrachloride *	380	142	0.0299	0.0112			0.000103	0.000023
Chlorobenzene	380	142	0.0299	0.0112			0.097270	0.013017
Chloroethane	295	110	0.0232	0.0087				
Chloroform *	325	111	0.0256	0.0087			0.010949	0.000583
2-Chlorophenol	0	0	0.0000	0.0000			0.009346	0.006241
Chrysene*	47	19	0.0037	0.0015			0.000001	0.000000
Di-n-Butyl phthalate	43	20	0.0034	0.0016			0.281427	0.160901
1,2-Dichlorobenzene	794	196	0.0624	0.0154			0.081087	0.036874
1,3-Dichlorobenzene	380	142	0.0299	0.0112			0.060365	0.027451
1,4-Dichlorobenzene	380	142	0.0299	0.0112			0.012073	0.005490
1,1-Dichloroethane	59	22	0.0046	0.0017				
1,2-Dichloroethane *	574	180	0.0451	0.0142			0.002294	0.000041
1,1-Dichloroethylene *	60	22	0.0047	0.0017			0.447267	0.034659
1,2-trans-Dichloroethylene	66	25	0.0052	0.0020			0.634100	0.014680

2,4-Dichlorophenol	0	0	0.0000	0.0000			1846.212	0.006999
1,2-Dichloropropane	794	196	0.0624	0.0154			0.000912	0.000053
1,3-Dichloropropylene	794	196	0.0624	0.0154			0.001318	0.000037
PARAMETER	LIMITS		MASS LIMIT		ACUTE	CHRONIC	HUMAN HEALTH	
	UG/L		LBS/D				Fish	Water
	MAX.	AVG.	MAX.	AVG.				
Diethyl phthalate	113	46	0.0089	0.0036			2.7449	1.4347
2,4-Dimethylphenol	47	19	0.0037	0.0015			0.0534	0.0312
Dimethyl phthalate	47	19	0.0037	0.0015			69.5749	24.3963
4,6-Dinitro-o-cresol**	277	78	0.0218	0.0061			0.0177	0.0014
2,4-Dinitophenol	4291	1207	0.3374	0.0949			0.3340	0.0073
2,4-Dinitotoluene*	0	0	0.0000	0.0000			0.0002	0.0000
2,6-Dinitotoluene	0	0	0.0000	0.0000				
Ethylbenzene	380	142	0.0299	0.0112			0.1336	0.0481
Fluoranthene	54	22	0.0042	0.0017			0.0087	0.0082
Fluorene	47	19	0.0037	0.0015			0.3340	0.1036
Hexachlorobenzene *	794	196	0.0624	0.0154			0.00000002	0.00000002
Hexachlorobutadiene *	380	142	0.0299	0.0112			0.0012	0.0000
Hexachloroethane *	794	196	0.0624	0.0154			0.0002	0.0001
Methyl Chloride*	295	110	0.0232	0.0087				
Methylene Chloride*	170	36	0.0134	0.0028			0.0371	0.0005
Naphthalene	47	19	0.0037	0.0015				
Nitrobenzene	6402	2237	0.5034	0.1759			0.0433	0.0018
2-Nitrophenol	231	65	0.0182	0.0051				
4-Nitrophenol	576	162	0.0453	0.0127				
Phenanthrene	47	19	0.0037	0.0015				
Phenol	47	19	0.0037	0.0015			53.6721	1.1039
Pyrene	48	20	0.0038	0.0016			0.2505	0.0777
Tetrachloroethylene *	164	52	0.0129	0.0041			0.0002	0.0001
Toluene	74	28	0.0058	0.0022			0.9363	0.1295
Total Chromium	2770	1110	0.0000	0.0000	0.1651	0.0215		
Total Copper	3380	1450	0.0000	0.0000	0.0019	0.0014		
Total Cyanide	1200	420	0.0000	0.0000	0.0024	0.0006	1.0019	0.0148
Total Lead	690	320	0.0000	0.0000	0.0069	0.0001		
Total Nickel	3980	1690	0.0000	0.0000	0.0554	0.0062	0.1066	0.0441
Total Zinc	2610	1050	0.0000	0.0000	0.0212	0.0214	1.5987	0.6611
1,2,4-Trichlorobenzene	794	196	0.0624	0.0154			0.0044	0.0028
1,1,1-Trichloroethane	59	22	0.0046	0.0017				
1,1,2-Trichloroethane *	127	32	0.0100	0.0025			0.0010	0.0001
Trichloroethylene *	69	26	0.0054	0.0020			0.0019	0.0003
Vinyl Chloride *	172	97	0.0135	0.0076			0.0002	0.0000
* DESIGNATES CARCINOGENIC COMPOUNDS			Metal acute and chronic calculations are based on a hardness of 50 mg/l as CaCO3					
** SAME AS 4,6-DINITRO-2-METHYLPHENOL								

# Waste Load Allocation Summary

Comments Included

Yes  No

Information Verified By

Page 1

## General Information

Receiving Stream Name  Year File Was Created

Previous File Name  OR: Local Name (if applicable)

Facility Name

Previous Discharger Name  Or-AKA (includes previous file name)

11 Digit HUC Code

12 Digit HUC Code

River Basin

County

Use Classification

Date of WLA Response

Discharge Latitude

Lat/Long Method

Discharge Longitude

Approved TMDL?

Site Visit Completed?  Yes  No

Yes  No

Date of Site Visit

Approval Date of TMDL

Waterbody Impaired?  Yes  No

Antidegradation  Yes  No

## Permit Information

Waterbody Tier Level

Permit Number

Use Support Category

Permit Status

Other Point Sources?  Yes  No

Sources Included in Model

Type of Discharger

- Municipal
- Industrial
- Semipublic/Private

## Waste Load Allocation Information

Modeled Reach Length  Miles

Date of Allocation

Name of Model Used

Allocation Type

Model Completed by

Type of Model Used

Allocation Developed by



# Waste Load Allocation Summary

## Seasonal Effluent Limits

Annual Effluent Limits	Qw <input type="text"/> MGD	Qw <input type="text"/> MGD	Qw <input type="text"/> MGD	Qw <input type="text"/> MGD
Qw <input type="text"/> 0.022 <input type="text"/> MGD	Season <input type="text"/>	Season <input type="text"/>	Season <input type="text"/>	Season <input type="text"/>
CBOD5 <input type="text"/> 25 <input type="text"/> mg/l	From <input type="text"/>	From <input type="text"/>	From <input type="text"/>	From <input type="text"/>
NH3-N <input type="text"/> 2.2 <input type="text"/> mg/l	Through <input type="text"/>	Through <input type="text"/>	Through <input type="text"/>	Through <input type="text"/>
TKN <input type="text"/> <input type="text"/> mg/l	CBOD5 <input type="text"/> <input type="text"/> mg/l	CBOD5 <input type="text"/> <input type="text"/> mg/l	CBOD5 <input type="text"/> <input type="text"/> mg/l	CBOD5 <input type="text"/> <input type="text"/> mg/l
D.O. <input type="text"/> 5.5 <input type="text"/> mg/l	NH3-N <input type="text"/> <input type="text"/> mg/l	NH3-N <input type="text"/> <input type="text"/> mg/l	NH3-N <input type="text"/> <input type="text"/> mg/l	NH3-N <input type="text"/> <input type="text"/> mg/l
	TKN <input type="text"/> <input type="text"/> mg/l	TKN <input type="text"/> <input type="text"/> mg/l	TKN <input type="text"/> <input type="text"/> mg/l	TKN <input type="text"/> <input type="text"/> mg/l
	D.O. <input type="text"/> <input type="text"/> mg/l	D.O. <input type="text"/> <input type="text"/> mg/l	D.O. <input type="text"/> <input type="text"/> mg/l	D.O. <input type="text"/> <input type="text"/> mg/l

"Monitor Only" Parameters for Effluent:	Parameter	Frequency	Parameter	Frequency
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Water Quality Characteristics Immediately Upstream of Discharge				
Parameter	Summer		Winter	
CBODu	<input type="text"/>	mg/l	<input type="text"/>	mg/l
NH3-N	<input type="text"/>	mg/l	<input type="text"/>	mg/l
Temperature	<input type="text"/>	°C	<input type="text"/>	°C
pH	<input type="text"/>	su	<input type="text"/>	su

Hydrology at Discharge Location				
<b>Drainage Area Qualifier</b>	Drainage Area	0.04	sq mi	<b>Method Used to Calculate</b>
<input type="text"/> Exact	Stream 7Q10	0	cfs	<5.0 sq mi - Bingham Equation
	Stream 1Q10	<input type="text"/>	cfs	<input type="text"/>
	Stream 7Q2	<input type="text"/>	cfs	<input type="text"/>
	Annual Average	<input type="text"/>	cfs	<input type="text"/>

**Comments and/or Notations** Discharge goes to a man-made drainage ditch which, in turn, flows into the UT. Length of ditch is approximately 50 yds.

$Q_{d1} * C_{d1} + Q_{d2} * C_{d2} + Q_s * C_s = Q_r * C_r$							Enter Max Daily Discharge as reported by Applicant (C <sub>d</sub> ) Max	Enter Avg Daily Discharge as reported by Applicant (C <sub>d</sub> ) Ave	Partition Coefficient (Stream / Lake)
ID	Pollutant	Carbogen "yes"	Type	Background from upstream source (C <sub>d1</sub> ) Daily Max	Background from upstream source (C <sub>d2</sub> ) Monthly Ave	Background Instream (C <sub>s</sub> ) Daily Max	Background Instream (C <sub>s</sub> ) Monthly Ave	µg/l	µg/l
1	Arsimony		Metals	0	0	0	0	0	0
2	Arsenic**	YES	Metals	0	0	0	0	41.2	41.2
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	15	15
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0
7	Copper**		Metals	0	0	0	0	28.7	28.7
8	Lead**		Metals	0	0	0	0	0	0
9	Mercury**		Metals	0	0	0	0	0	0
10	Nickel**		Metals	0	0	0	0	0	0
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	24	24
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	ArcIn		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	17.6	17.6
23	Carbon Tetrachloride*	YES	VOC	0	0	0	0	0	0
24	Chlordane	YES	VOC	0	0	0	0	0	0
25	Chlorobenzene	YES	VOC	0	0	0	0	0	0
26	ChloroDibromo-Methane*	YES	VOC	0	0	0	0	1.1	1.1
27	Chloroethane	YES	VOC	0	0	0	0	0	0
28	2-Chloro-Ethylvinyl Ether	YES	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	YES	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	YES	VOC	0	0	0	0	0	0
37	1,1-Dichloroethylene*	YES	VOC	0	0	0	0	0	0
38	1,2-Dichloropropane	YES	VOC	0	0	0	0	0	0
39	1,3-Dichloro-Propylene	YES	VOC	0	0	0	0	0	0
40	Dieldrin	YES	VOC	0	0	0	0	0	0
41	Ethylbenzene	YES	VOC	0	0	0	0	0	0
42	Methyl Bromide	YES	VOC	0	0	0	0	0	0
43	Methyl Chloride	YES	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	YES	VOC	0	0	0	0	0	0
48	Toxaphene	YES	VOC	0	0	0	0	0	0
49	Tributyltin (TBT)	YES	VOC	0	0	0	0	0	0
50	1,1,1-Trichloroethane	YES	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	YES	Acids	0	0	0	0	0	0
55	2-Chlorophenol	YES	Acids	0	0	0	0	0	0
56	2,4-Dichlorophenol	YES	Acids	0	0	0	0	0	0
57	2,4-Dimethylphenol	YES	Acids	0	0	0	0	0	0
58	4,6-Dinitro-o-Cresol	YES	Acids	0	0	0	0	0	0
59	2,4-Dinitrophenol	YES	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	YES	Acids	0	0	0	0	0	0
63	4-Nitrophenol	YES	Acids	0	0	0	0	0	0
64	Pentachlorophenol*	YES	Acids	0	0	0	0	0	0
65	Phenol	YES	Acids	0	0	0	0	0	0
66	2,4,6-Trichlorophenol*	YES	Acids	0	0	0	0	0	0
67	Acenaphthene	YES	Bases	0	0	0	0	0	0
68	Acenaphthylene	YES	Bases	0	0	0	0	0	0
69	Anthracene	YES	Bases	0	0	0	0	0	0
70	Benidine	YES	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	YES	Bases	0	0	0	0	0	0
74	Benzo(GH)Perylene	YES	Bases	0	0	0	0	0	0
75	Benzo(K)Fluoranthene	YES	Bases	0	0	0	0	0	0
76	Bis (2-Chloroethyl) Methane	YES	Bases	0	0	0	0	0	0
77	Bis (2-Chloroethyl)-Ether*	YES	Bases	0	0	0	0	0	0
78	Bis (2-Chloroisopropyl) Ether	YES	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	YES	Bases	0	0	0	0	0	0
81	Butyl Benzyl Phthalate	YES	Bases	0	0	0	0	0	0
82	2-Chloronaphthalene	YES	Bases	0	0	0	0	0	0
83	4-Chlorophenyl Phenyl Ether	YES	Bases	0	0	0	0	0	0
84	Chrysenes*	YES	Bases	0	0	0	0	0	0
85	Di-N-Butyl Phthalate	YES	Bases	0	0	0	0	0	0
86	Di-N-Octyl Phthalate	YES	Bases	0	0	0	0	0	0
87	Dibenzo(A,H)Anthracene*	YES	Bases	0	0	0	0	0	0
88	1,2-Dichlorobenzene	YES	Bases	0	0	0	0	0	0
89	1,3-Dichlorobenzene	YES	Bases	0	0	0	0	0	0
90	1,4-Dichlorobenzene	YES	Bases	0	0	0	0	0	0
91	3,3-Dichlorobenzidine*	YES	Bases	0	0	0	0	0	0
92	Diethyl Phthalate	YES	Bases	0	0	0	0	0	0
93	Dimethyl Phthalate	YES	Bases	0	0	0	0	0	0
94	2,4-Dinitrofluorene*	YES	Bases	0	0	0	0	0	0
95	1,6-Dinitrobenzene	YES	Bases	0	0	0	0	0	0
96	1,2-Diphenylhydrazine	YES	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	Fluorobenzene	YES	Bases	0	0	0	0	0	0
103	Fluorene	YES	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 (delta)	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	YES	Bases	0	0	0	0	0	0
112	Hexachloroethane	YES	Bases	0	0	0	0	0	0
113	Indene(1,2,3-CD)Pyrene*	YES	Bases	0	0	0	0	0	0
114	Isoflorone	YES	Bases	0	0	0	0	0	0
115	Naphthalene	YES	Bases	0	0	0	0	0	0
116	Nitrobenzene	YES	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	YES	Bases	0	0	0	0	0	0
128	Pyrene	YES	Bases	0	0	0	0	0	0
129	1,2,4-Trichlorobenzene	YES	Bases	0	0	0	0	0	0

0.014	Enter Q <sub>1</sub> = wastewater discharge flow from facility (MGD)
0.02166121	Q <sub>2</sub> = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Qd2 = background stream flow in MGD above point of discharge
0	Qd2 = background stream flow from upstream source (cfs)
43.1640	Enter 7Q10, Q <sub>2</sub> = background stream flow in cfs above point of discharge
32.3730	Enter or estimated, 1Q10, Q <sub>2</sub> = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
1,645.5180	Enter Mean Annual Flow, Q <sub>2</sub> = background stream flow in cfs above point of discharge
50.52	Enter 7Q2, Q <sub>2</sub> = background stream flow in cfs above point of discharge (For LWF class streams)
Enter in full	Enter C <sub>s</sub> = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q <sub>1</sub> + Qd2 + Q <sub>2</sub>	Q <sub>r</sub> = resultant in-stream flow, after discharge
Calculated on other	C <sub>r</sub> = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
50.00	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.00 s.a.	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

March 28, 2024

Facility Name: Arclin, Inc - DSM04 based on application  
 NPDES No.: AL000088

Freshwater PFW classification				Freshwater Acute (µg/l) C <sub>a</sub> = 1Q10								Freshwater Chronic (µg/l) C <sub>c</sub> = 7Q10				Human Health Consumption Risk only (µg/l) Carcinogen C <sub>a</sub> = Annual Average Non-Carcinogen C <sub>c</sub> = 7Q10				
ID	Pollutant	RP?	Carcinogen yes	Background from upstream source (C <sub>u</sub> ) Daily Max	Max Daily Discharge as reported by Applicant (C <sub>max</sub> )	Water Quality Criteria (C <sub>1</sub> )	Drift Permit Limit (C <sub>perm</sub> )	20% of Drift Permit Limit	RP?	Background from upstream source (C <sub>u</sub> ) Monthly Ave	Avg Daily Discharge as reported by Applicant (C <sub>avg</sub> )	Water Quality Criteria (C <sub>1</sub> )	Drift Permit Limit (C <sub>perm</sub> )	20% of Drift Permit Limit	RP?	Water Quality Criteria (C <sub>1</sub> )	Drift Permit Limit (C <sub>perm</sub> )	20% of Drift Permit Limit	RP?	
1	Antimony			0	0						0									
2	Arsenic		YES	0	41.2	582.244	865845.199	177169.039	No	0	41.2	281.234	520998.302	104199.660	No	0.3030	23020.3426	4604.0095	No	
3	Beryllium			0	0						0									
4	Cadmium			0	0		6501.197	1300.239	No	0	0		1283.156	256.631	No					
5	Chromium/ Chromium III			0	15	1531.918	#####	459994.404	No	0	15	2020.051	369838.792	79767.795	No					
6	Chromium/ Chromium VI			0	0		23928.242	4785.648	No	0	0		21830.555	4366.111	No					
7	Copper			0	28.7	19.959	28958.718	5381.744	No	0	28.7	43.790	25450.548	5090.109	No					
8	Lead			0	0	180.301	218780.168	43750.034	No	0	0		5.924	11865.488	2273.100	No				
9	Mercury			0	0		3589.238	717.847	No	0	0		8.972	23.924	4.785	4.24E-02	6.46E+01	1.89E+01	No	
10	Nickel			0	0		771423.124	154284.825	No	0	0		12.292	114222.827	22844.525	No	9.93E+02	1.98E+06	3.98E+05	No
11	Selenium			0	0		29910.303	5982.061	No	0	0		1.889	9668.434	1993.687	No	1.0E+03	4845786.61	969153.32	No
12	Silver			0	0		1460.295	292.057	No	0	0									
13	Thallium			0	0						0									
14	Zinc			0	24	187.599	295168.040	59033.606	No	0	24	195.061	398710.342	79742.068	No	1.49E+04	2.97E+07	5.94E+06	No	
15	Cyanide			0	0		32901.333	6580.267	No	0	0		5.048	10367.172	2073.434	No	1.0E+04	1.86E+07	3.72E+06	No
16	Total Phenolic Compounds			0	0						0									
17	Hardness (As CaCO3)			0	0						0									
18	Acrolein			0	0						0									
19	Acrylonitrile			0	0						0									
20	Aldrin	YES		0	0		4486.545	897.309	No	0	0									
21	Benzene	YES		0	0						0									
22	Bromoform	YES		0	17.6						17.6									
23	Carbon Tetrachloride	YES		0	0						0									
24	Chlordane	YES		0	0	3.493	3589.238	717.847	No	0	0	9.054	8.573	1.715	No	4.7E+04	3.56E+01	7.18E+00	No	
25	Chlorobenzene	YES		0	0						0									
26	Chlorodibromo-Methane	YES		0	1.1						1.1									
27	Chloroethane	YES		0	0						0									
28	2-Chloro-Ethylvinyl Ether	YES		0	0						0									
29	Chloroform	YES		0	0						0									
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	1645.067	329.013	No	0	0	0.001	1.894	0.389	No	1.0E+04	9.73E+00	1.95E+00	No	
33	Dichlorobromo-Methane	YES		0	0						0									
34	1,1-Dichloroethane	YES		0	0						0									
35	1,2-Dichloroethane	YES		0	0						0									
36	Trans-1,2-Dichloro-Ethylene	YES		0	0						0									
37	1,1-Dichloroethylene	YES		0	0						0									
38	1,2-Dichloropropane	YES		0	0						0									
39	1,3-Dichloro-Propylene	YES		0	0						0									
40	Dieldrin	YES		0	0	0.001	356.924	71.385	No	0	0	0.008	111.646	22.329	No	1.0E+04	2.37E+00	4.74E+01	No	
41	Ethylbenzene	YES		0	0						0									
42	Methyl Bromide	YES		0	0						0									
43	Methyl Chloride	YES		0	0						0									
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	YES		0	0						0									
48	Toxaphene	YES		0	0	0.001	1081.728	216.345	No	0	0	0.002	0.399	0.080	No	1.0E+04	1.74E+07	3.48E+06	No	
49	Tributyltin (TBT)	YES		0	0	0.001	697.897	139.587	No	0	0	0.001	143.545	28.709	No	1.0E+04	1.23E+01	2.46E+00	No	
50	1,1,1-Trichloroethane	YES		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	YES		0	0						0									
55	2-Chlorophenol	YES		0	0						0									
56	2,4-Dichlorophenol	YES		0	0						0									
57	2,4-Dimethylphenol	YES		0	0						0									
58	4,6-Dinitro-O-Cresol	YES		0	0						0									
59	4-Dinitrophenol	YES		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	2-Nitrophenol	YES		0	0						0									
63	4-Nitrophenol	YES		0	0						0									
64	Pentachlorophenol	YES		0	0	0.001	13045.858	2609.172	No	0	0	0.001	13342.916	2668.583	No	1.0E+04	1.34E+05	2.68E+04	No	
65	Phenol	YES		0	0						0									
66	2,4,6-Trichlorophenol	YES		0	0						0									
67	Acenaphthene	YES		0	0						0									
68	Acenaphthylene	YES		0	0						0									
69	Anthracene	YES		0	0						0									
70	Benzidine	YES		0	0						0									
71	Benzo(a)Anthracene	YES		0	0						0									
72	Benzo(a)Pyrene	YES		0	0						0									
73	Benzo(b)fluoranthene	YES		0	0						0									
74	Benzo(g)Perylene	YES		0	0						0									
75	Benzo(k)Fluoranthene	YES		0	0						0									
76	Bis (2-Chloroethoxy) Methane	YES		0	0						0									
77	Bis (2-Chloroethyl) Ether	YES		0	0						0									
78	Bis (2-Chloroisopropyl) Ether	YES		0	0						0									
79	Bis (2-Ethylhexyl) Phthalate	YES		0	0						0									
80	4-Bromophenyl Phenyl Ether	YES		0	0						0									
81	Butyl Benzyl Phthalate	YES		0	0						0									
82	2-Chloroaniline	YES		0	0						0									
83	4-Chlorophenyl Phenyl Ether	YES		0	0						0									
84	Chrysene	YES		0	0						0									
85	Di-N-Butyl Phthalate	YES		0	0						0									
86	Di-N-Octyl Phthalate	YES		0	0						0									
87	Dibenz(a,h)Anthracene	YES		0	0						0									
88	1,2-Dichlorobenzene	YES		0	0						0									
89	1,3-Dichlorobenzene	YES		0	0						0									
90	1,4-Dichlorobenzene	YES		0	0						0									
91	3,3-Dichlorobenzidine	YES		0	0						0									
92	Diethyl Phthalate	YES		0	0						0									
93	Dimethyl Phthalate	YES		0	0						0									
94	2,4-Dinitrotoluene	YES		0	0						0									
95	2,6-Dinitrotoluene	YES		0	0						0									
96	1,2-Diphenylhydrazine	YES		0	0						0									
97	Endosulfen (alpha)	YES		0	0		329.013	65.803	No	0	0	1.000	111.646	22.329	No	1.0E+04	2.34E+02	4.67E+01	No	
98	Endosulfen (beta)	YES		0	0		329.013	65.803	No	0	0	1.000	111.646	22.329	No	1.0E+04	3.04E+05	7.88E+05	No	
99	Endosulfen sulfate	YES	</																	

OCPSF PERMIT LIMITS CALCULATIONS

FACILITY NAME : Arelin, Inc.

Prepared By: Victoria Kim

LOCATION : Andalusia

Prepared Date: November 17, 2023

NPDES NUMBER : AL0000868 (Outfall DSN004)

IS THIS A RAYON MANUFACTURING FACILITY THAT USES THE VISCOSE PROCESS OR AN ACRYLIC MANUFACTURER THAT USES THE ZINC CHLORIDE/SOLVENT PROCESS (YES =0, NO =1) |

DOES THIS FACILITY USE END-OF-PIPE BIOLOGICAL TREATMENT (SUBPART I) (YES =0, NO =1) |

OCPSF PRODUCT	SIC CODE	ANNUAL PROD. MILLION LBS-YR	PROCESS WASTE FLOW MGD
Subpart B Rayon Fibers		0	0
Subpart C Other Fibers		0	0
Subpart D Thermoplastic Resins		0	0
Subpart E Thermosetting Resins	2821	215.35	0.00168
Subpart F Commodity Organic Chemic	2869	51.1	0.00775
Subpart G Bulk Organic		0	0
Subpart H Specialty Organic		0	0
OCPSF RELATED FLOWS	TOTAL	266.45	0.00943

FLOW FROM OTHER SOURCES (e.g. POTWs)	0 MGD
TOTAL FLOW FROM PROCESS, NON-PROCESS AND OTHER SOURCES	0.01287 MGD
RECEIVING STREAM 1Q10	32.373 CFS
RECEIVING STREAM 7Q10	43.164 CFS
RECEIVING STREAM ANNUAL-AVERAGE FLOW	1645.52 CFS
METAL-BEARING WASTE STREAM VOLUME	0 MGD
CYANIDE-BEARING WASTE STREAM VOLUME	0 MGD



	BOD5		TSS	
	Max.	Avg.	Max.	Avg.
Process Total (mg/l)	147.1	55.1	203.2	65.0
Process Total (lb/day)	11.6	4.3	16.0	5.0
Non-process total (lb/day)	0.574	0.287	0.574	0.287
Final Mass Limits (lb/day)	12.1	4.6	16.5	5.2

BA1 Limits are based on 40 CFR 414 Subpart J requirements

PARAMETER	LIMITS		MASS LIMIT		ACUTE	CHRONIC	HUMAN HEALTH		
	UG/L	AVG.	LBS/D	AVG.			LBS/D	Fish Consumption	Water Consumption
	MAX.		MAX.						
Acenaphthene	47	19	0.0037	0.0015					
Acenaphthylene	47	19	0.0037	0.0015					
Acrylonitrile*	232	94	0.0182	0.0074			1.276641	0.010400	
Anthracene	47	19	0.0037	0.0015			5427.944668	1684.775162	
Benzene *	134	57	0.0105	0.0045			137.176902	0.260479	
Benzo(a)anthracene*	47	19	0.0037	0.0015			0.094454	0.000769	
3,4-Benzofluoranthene*	48	20	0.0038	0.0016			0.094454	0.000769	
Benzo(k)fluoranthene*	47	19	0.0037	0.0015			0.094454	0.000769	
Benzo(a)pyrene*	48	20	0.0038	0.0016			0.094454	0.000769	
Bis(2-ethylhexyl) phthalate	258	95	0.0203	0.0075			0.298269	0.197169	
Carbon Tetrachloride *	380	142	0.0299	0.0112			8.486652	0.048889	
Chlorobenzene	380	142	0.0299	0.0112			210.824070	28.213354	
Chloroethane	295	110	0.0232	0.0087					
Chloroform *	325	111	0.0256	0.0087			904.287726	1.263806	
2-Chlorophenol	0	0	0.0000	0.0000			20.256419	13.526711	
Chrysene*	47	19	0.0037	0.0015			0.094454	0.000769	
Di-n-Butyl phthalate	43	20	0.0034	0.0016			609.968551	348.739977	
1,2-Dichlorobenzene	794	196	0.0624	0.0154			175.749938	79.921181	
1,3-Dichlorobenzene	380	142	0.0299	0.0112			130.836034	59.496835	
1,4-Dichlorobenzene	380	142	0.0299	0.0112			26.167207	11.899367	
1,1-Dichloroethane	59	22	0.0046	0.0017					
1,2-Dichloroethane *	574	180	0.0451	0.0142			189.435158	0.087902	
1,1-Dichloroethylene *	60	22	0.0047	0.0017			36939.858120	75.120614	
1,2-trans-Dichloroethylene	66	25	0.0052	0.0020			1374.359545	31.818225	

2,4-Dichlorophenol	0	0	0.0000	0.0000			4001509.659	15.168731
1,2-Dichloropropane	794	196	0.0624	0.0154			1.976235	0.114468
1,3-Dichloropropylene	794	196	0.0624	0.0154			2.857221	0.079174
PARAMETER	LIMITS		MASS LIMIT		ACUTE	CHRONIC	HUMAN HEALTH	
	UG/L		LBS/D				Fish	Water
	MAX.	AVG.	MAX.	AVG.				
Diethyl phthalate	113	46	0.0089	0.0036			5949.2824	3109.5294
2,4-Dimethylphenol	47	19	0.0037	0.0015			115.7510	67.6617
Dimethyl phthalate	47	19	0.0037	0.0015			150797.7488	52876.9756
4,6-Dinitro-o-cresol**	277	78	0.0218	0.0061			38.2831	2.9338
2,4-Dinitrophenol	4291	1207	0.3374	0.0949			723.8268	15.9278
2,4-Dinitrotoluene*	0	0	0.0000	0.0000			17.5600	0.0249
2,6-Dinitrotoluene	0	0	0.0000	0.0000				
Ethylbenzene	380	142	0.0299	0.0112			289.5316	104.2314
Fluoranthene	54	22	0.0042	0.0017			18.8825	17.8478
Fluorene	47	19	0.0037	0.0015			723.8291	224.6367
Hexachlorobenzene *	794	196	0.0624	0.0154			0.0014878	0.00003875
Hexachlorobutadiene *	380	142	0.0299	0.0112			95.3990	0.1002
Hexachloroethane *	794	196	0.0624	0.0154			17.0025	0.2525
Methyl Chloride*	295	110	0.0232	0.0087				
Methylene Chloride*	170	36	0.0134	0.0028			3064.6400	1.0713
Naphthalene	47	19	0.0037	0.0015				
Nitrobenzene	6402	2237	0.5034	0.1759			93.9223	3.9024
2-Nitrophenol	231	65	0.0182	0.0051				
4-Nitrophenol	576	162	0.0453	0.0127				
Phenanthrene	47	19	0.0037	0.0015				
Phenol	47	19	0.0037	0.0015			116329.7186	2392.6779
Pyrene	48	20	0.0038	0.0016			542.8719	168.4775
Tetrachloroethylene *	164	52	0.0129	0.0041			16.9957	0.1403
Toluene	74	28	0.0058	0.0022			2029.4281	280.6749
Total Chromium	2770	1110	0.0000	0.0000	268.3990	46.5441		
Total Copper	3380	1450	0.0000	0.0000	3.1459	2.9700		
Total Cyanide	1200	420	0.0000	0.0000	3.8395	1.2098	2171.4881	32.0909
Total Lead	690	320	0.0000	0.0000	11.2620	0.2731		
Total Nickel	3980	1690	0.0000	0.0000	90.0223	13.3298	231.0094	95.5200
Total Zinc	2610	1050	0.0000	0.0000	34.4452	46.2950	3465.1405	1432.8001
1,2,4-Trichlorobenzene	794	196	0.0624	0.0154			9.5241	6.0097
1,1,1-Trichloroethane	59	22	0.0046	0.0017				
1,1,2-Trichloroethane *	127	32	0.0100	0.0025			80.6485	0.1338
Trichloroethylene *	69	26	0.0054	0.0020			154.8841	0.5576
Vinyl Chloride *	172	97	0.0135	0.0076			12.6290	0.0057

\* DESIGNATES CARCINOGENIC COMPOUNDS

Metal acute and chronic calculations are based on a hardness of 50 mg/l as CaCO3

\*\* SAME AS 4,6-DINITRO-2-METHYLPHENOL

# Waste Load Allocation Summary

## REQUEST INFORMATION

Request Number: 3977

From: Victoria Kim In Branch/Section Industrial

Date Submitted 10/4/2023 Date Required 11/3/2023 FUND Code 210

Date Permit application received by NPDES program 7/7/2023

Receiving Waterbody Conecuh River

Previous Conecuh River

Facility Arclin, Inc. (Name of Discharger-WQ will use to file)

Arclin, Inc. Previous Discharger Name

River Basin Escambia Outfall Latitude 31.341389 (decimal degrees)

\*County Covington Outfall Longitude -86.533333 (decimal degrees)

Permit Number AL0000868 Permit Permit Reissuance

Permit Active

Type of Discharger INDUSTRIAL

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

If yes, impacting dischargers names.

Impacting dischargers permit numbers.

Existing Discharge Design Flow 0.025 MGD  
Proposed Discharge Design Flow 0.014 MGD

Note: The flow rates given should be those requested for modeling.

Comments Included

Yes  No

Information Verified By

Year File Was Created

Response ID Number 1984

Lat/Long Method GPS

12 Digit HUC Code 031403010501

Use Classification F&W

Site Visit Completed?

Date of Site Visit 10/25/2023

Waterbody Impaired?

Date of WLA Response 11/15/2023

Antidegradation  Yes  No

Approved TMDL?

Waterbody Tier Level Tier II

Approval Date of TMDL

Use Support Category 1

## Waste Load Allocation Information

Modelled Reach Length 1.356 Miles

Date of Allocation 11/9/2023

Name of Model Used SWQM

Allocation Type Annual

Model Completed by HAW

Type of Model Used Desktop

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 33.4 mg/L			CBOD5		TP		TP	
NH3-N 20 mg/L			NH3-N		TN		TN	
TKN mg/L			TKN		TSS		TSS	
D.O. 2 mg/L			D.O.					

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

Parameter	Summer		Winter	
	CBODu	2	mg/l	
NH3-N	0.11	mg/l		mg/l
Temperature	30	°C		°C
pH	7	su		su

### Hydrology at Discharge Location

Drainage Area Qualifier	Drainage Area	sq mi
Exact	1265.483	sq mi
	Stream 7Q10	43.164 cfs
	Stream 1Q10	32.373
	Stream 7Q2	50.52 cfs
	Annual Average	1645.518 cfs

### Method Used to Calculate

ADEM Estimate w/USGS Gage Data
75% of 7Q10
ADEM Estimate w/USGS Gage Data
ADEM Estimate w/USGS Gage Data

**Comments and/or Notations** This WLA is specifically for Outfall 004. The CBOD5 annual effluent limit of 33.4 mg/l is equivalent to 3.9 lb/d given the proposed discharge flow.

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

version 2.7

(Submission #: HPV-XCDP-CVTQV, version 1)

## Details

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**Submission ID** HPV-XCDP-CVTQV

**Status** In Process

## Fees

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<b>Fee</b>	\$5,615.00
<b>Payments/Adjustments</b>	(\$5,615.00)
<b>Balance Due</b>	\$0.00 (Paid)

## Form Input

---

### General Instructions

### 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):**

AL0000868

**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**

AL0000868

**Current Permittee Name**

Arclin USA LLC

**Permittee****Permittee Name**

Arclin USA LLC

**Mailing Address**

14139 US Highway 84

Andalusia, AL 36421

❶ 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**

Daniel              Cox

**Title**

Plant Manager

**Organization Name**

Arclin USA LLC

**Phone Type      Number              Extension**

Mobile              3343438101

**Email**

daniel.cox@arclin.com

**Mailing Address**

14139 US Highway 84

Andalusia, AL 36421

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?

No

**Existing Permit Contacts**

Affiliation Type	Contact Information	Remove?
DMR Contact,Environmental Contact	Andy Smith, Arclin USA LLC	NONE PROVIDED
Permittee	Arclin USA LLC	NONE PROVIDED
Notification Recipient,Responsible Official	Bobby Franklin, Arclin USA LLC	Remove

## Facility/Site Information

**Facility/Site Name**

Arclin, Inc.

**Organization/Ownership Type**

LLC

**Facility/Site Address or Location Description**

14139 US Highway 84  
Andalusia, AL 36421

**Facility/Site County**

Covington

**Detailed Directions to the Facility/Site**

NONE PROVIDED

**Facility Map**

[Site Map - Form 187.pdf - 07/05/2023 09:36 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**

31.34166700000001,-86.52611100000000

14139 US Highway 84, Andalusia, AL

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

2821-Plastics Material Synthetic Resins and Nonvulcanizable Elastomers

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

325211-Plastics Material and Resin Manufacturing

325199-All Other Basic Organic Chemical Manufacturing

**Facility/Site Contact**

**Prefix**

Mr.

**First Name      Last Name**

Daniel              Cox

**Title**

Plant Manager

**Organization Name**

Arclin USA LLC

**Phone Type    Number            Extension**

Mobile            3343438101

**Email**

daniel.cox@arclin.com

**Address**

14139 US Highway 84  
Andalusia, AL 36421

**DMR Contact(s) (1 of 1)**

**DMR Contact****Prefix***Mr.***First Name      Last Name**Andy                  *Smith***Title***EHS Manager***Phone Type    Number          Extension**

Business          3342227581    227

**Email**

andy.smith@arclin.com

**Address**

14139 US Highway 84

Andalusia, AL 36421

**Applicant Business Entity Information****Address of Incorporation**

14139 US Highway 84

Andalusia, AL. 36421

**Agent Designated by the Corporation for Purposes of Service**

Name	Address
Daniel Cox	14139 US Highway 84 Andalusia, AL. 36421

**Please provide all corporate officers**

Name	Title	Address
Mark Glaspey	Executive VP of Mfg.	1000 Holcomb woods Pkwy Suite 342 Roswell, GA. 30076

**Does the applicant applying for coverage have a Parent Corporation?**

Yes

**Parent Corporation of Applicant**

Name	Address
Arclin USA Holding Inc.	1000 Holcomb woods Pkwy Suite 342 Roswell, GA. 30076

**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 

(EPA) categorical effluent guideline standards. These facilities are termed **category 1 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:**  
Organic Chemicals Manufacturing

**Give a brief description of all operations at this facility including primary products or services:**  
Formaldehyde and Resin Manufacturing

### Water Supply

**Water Sources (check all that apply):**  
Municipal Water Utility

**Please specify the City of the Municipal Water Utility:**  
Andalusia

Name of Utility	Million Gallons per Day (MGD)
Andalusia Utilities Dept.	0.0073

### Cooling Water Intake Structure Information

**Does the provider of your source water operate a surface water intake?**  
No

**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)?**  
Yes

### Outfalls (1 of 3)

001

**Please click below if this discharge no longer exists or is no longer required:**  
NONE PROVIDED

**Outfall Identifier**  
001

**Receiving Water**  
Prestwood 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:**  
Process Water commingled with Stormwater

**Estimated Average Daily Flow (MGD)**  
0.00

**Monitoring/Sampling Point Location**  
31.3419000000000, -86.5241999999999

### Outfalls (2 of 3)

002

Please click below if this discharge no longer exists or is no longer required:  
NONE PROVIDED

**Outfall Identifier**  
002

**Receiving Water**  
Prestwood 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:**  
None apply

**Estimated Average Daily Flow (MGD)**  
0.00

**Monitoring/Sampling Point Location**  
31.34190000000000, -86.52419999999999

### Outfalls (3 of 3)

004

Please click below if this discharge no longer exists or is no longer required:  
NONE PROVIDED

**Outfall Identifier**  
004

**Receiving Water**  
Conecuh 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)**  
0.0140

**Monitoring/Sampling Point Location**  
31.34166700000000, -86.53333300000000

### Stormwater Outfalls (1 of 1)

003

Please click below if this discharge no longer exists or is no longer required:  
NONE PROVIDED

**Outfall Identifier**  
003

**Receiving Water**  
Prestwood 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:**  
Stormwater only (no comingled process waste water excluding air conditioner condensate and fire testing waters)

**Monitoring/Sampling Point Location**  
31.34190000000000, -86.52419999999999

**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**  
[Process Flow.pdf - 07/05/2023 10:19 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	N/A

**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	No

**Please describe the equipment below:**  
Mass Flow Meters used

**Please attach the process schematic with sampling equipment locations.**  
[Drawing with Flow Meters.pdf - 07/05/2023 11:25 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**

<b>Please list biocides below:</b>
See attachment

**Biocide/Corrosion Inhibitor Summary Sheet**

[Water Treatment Chemical List.pdf - 07/05/2023 10:29 AM](#)

**Comment**

NONE PROVIDED

**Safety Data Sheets (SDS)**

[Water Treatment Chemical SDS's.pdf - 07/05/2023 10:32 AM](#)

**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).**

Neutralization, pH correction

**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?**

Yes

Waste Generated	Quantity (lbs/day)	Disposal Method	On-Site or Off-Site?	If Off-Site, Identify the Facility:
Cooling Tower Clean out	70	Solidification	Off-Site	Big Sky Environmental

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

Yes

**Hauler Information**

Name	Address	City	State	Zip
Spectrum Industrial Services	85 Spectrum Cove	Alabaster	AL	35007

**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 with attachments.pdf - 07/05/2023 04:33 PM

**Comment**

NONE PROVIDED

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

EPA Form 2F with attachments.pdf - 07/05/2023 04:34 PM

EPA Form 2C with attachments.pdf - 07/05/2023 04:34 PM

**Comment**

NONE PROVIDED

**Other attachments (as needed)**

NONE PROVIDED

**Comment**

NONE PROVIDED

**Additional Attachments**

Please attach any additional information as needed.

BMP Plan.pdf - 07/06/2023 02:07 PM

**Comment**

BMP Plan

**Application Preparer**

## Application Preparer

**Prefix**

Mr.

**First Name      Last Name**

Andy              Smith

**Title**

HSE Coordinator

**Organization Name**

NONE PROVIDED

**Phone Type    Number      Extension**

Business      3342227581    227

**Email**

andy.smith@arclin.com

**Address**

14139 US Highway 84

Andalusia, AL 36421

## Attachments

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Date	Attachment Name	Context	Confidential?	User
7/6/2023 2:07 PM	BMP Plan.pdf	Attachment	No	Andy Smith
7/5/2023 4:34 PM	EPA Form 2F with attachments.pdf	Attachment	No	Andy Smith
7/5/2023 4:34 PM	EPA Form 2C with attachments.pdf	Attachment	No	Andy Smith
7/5/2023 4:33 PM	EPA Form 1 with attachments.pdf	Attachment	No	Andy Smith
7/5/2023 11:25 AM	Drawing with Flow Meters.pdf	Attachment	No	Andy Smith
7/5/2023 10:32 AM	Water Treatment Chemical SDS's.pdf	Attachment	No	Andy Smith
7/5/2023 10:29 AM	Water Treatment Chemical List.pdf	Attachment	No	Andy Smith
7/5/2023 10:19 AM	Process Flow.pdf	Attachment	No	Andy Smith
7/5/2023 9:36 AM	Site Map - Form 187.pdf	Attachment	No	Andy Smith

## 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** Daniel Cox on 07/07/2023 at 10:31 AM  
**By**

EPA Identification Number 100000088255	NPDES Permit Number AL0000868	Facility Name Arclin USA LLC	Form Approved 03/05/19 OMB No. 2040-0004
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Form 1 NPDES		<b>U.S. Environmental Protection Agency</b> <b>Application for NPDES Permit to Discharge Wastewater</b> <b>GENERAL INFORMATION</b>
--------------------	---	--

**SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(f) and (f)(1))**

Activities Requiring an NPDES Permit	1.1	<b>Applicants Not Required to Submit Form 1</b>	
	1.1.1	Is the facility a new or existing publicly owned treatment works? If yes, STOP. Do NOT complete Form 1. Complete Form 2A. <input checked="" type="checkbox"/> No	1.1.2 Is the facility a new or existing treatment works treating domestic sewage? If yes, STOP. Do NOT complete Form 1. Complete Form 2S. <input checked="" type="checkbox"/> No
	1.2	<b>Applicants Required to Submit Form 1</b>	
	1.2.1	Is the facility a concentrated animal feeding operation or a concentrated aquatic animal production facility? <input type="checkbox"/> Yes → Complete Form 1 and Form 2B. <input checked="" type="checkbox"/> No	1.2.2 Is the facility an existing manufacturing, commercial, mining, or silvicultural facility that is currently discharging process wastewater? <input checked="" type="checkbox"/> Yes → Complete Form 1 and Form 2C. <input type="checkbox"/> No
	1.2.3	Is the facility a new manufacturing, commercial, mining, or silvicultural facility that has not yet commenced to discharge? <input type="checkbox"/> Yes → Complete Form 1 and Form 2D. <input checked="" type="checkbox"/> No	1.2.4 Is the facility a new or existing manufacturing, commercial, mining, or silvicultural facility that discharges only nonprocess wastewater? <input type="checkbox"/> Yes → Complete Form 1 and Form 2E. <input checked="" type="checkbox"/> No
	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? <input checked="" type="checkbox"/> Yes → Complete Form 1 and Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15). <input type="checkbox"/> No	

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

Name, Mailing Address, and Location	2.1	<b>Facility Name</b> Arclin USA LLC		
	2.2	<b>EPA Identification Number</b> 100000088255		
	2.3	<b>Facility Contact</b>		
		Name (first and last) Andy Smith	Title EHS Manager	Phone number (334) 343-0429
	Email address andy.smith@arclin.com			
	2.4	<b>Facility Mailing Address</b>		
Street or P.O. box 14139 US Hwy 84				
City or town Andalusia		State AL.	ZIP code 36421	

EPA Identification Number 10000088255		NPDES Permit Number AL0000868		Facility Name ArclIn USA LLC		Form Approved 03/05/19 OMB No. 2040-0004	
Name, Mailing Address, and Location Continued	2.5	<b>Facility Location</b>					
	Street, route number, or other specific identifier 14139 US Hwy 84						
	County name Covington			County code (if known)			
	City or town Andalusia			State AL		ZIP code 36421	
<b>SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))</b>							
SIC and NAICS Codes	3.1	<b>SIC Code(s)</b>		<b>Description (optional)</b>			
		325211					
		325199					
	3.2	<b>NAICS Code(s)</b>		<b>Description (optional)</b>			
<b>SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))</b>							
Operator Information	4.1	<b>Name of Operator</b>					
	Daniel Cox						
	4.2	Is the name you listed in Item 4.1 also the owner? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
	4.3	<b>Operator Status</b> <input type="checkbox"/> Public—federal <input type="checkbox"/> Public—state <input type="checkbox"/> Other public (specify) _____ <input checked="" type="checkbox"/> Private <input type="checkbox"/> Other (specify) _____					
Operator Information Continued	4.4	<b>Phone Number of Operator</b>					
	(334) 343-8101						
Operator Information Continued	4.5	<b>Operator Address</b>					
		Street or P.O. Box 14139 US Hwy 84					
		City or town Andalusia			State AL		ZIP code 36421
		Email address of operator daniel.cox@arclIn.com					
<b>SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))</b>							
Indian Land	5.1	Is the facility located on Indian Land? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

EPA Identification Number 10000088255	NPDES Permit Number AL0000868	Facility Name Arclin USA LLC
--	----------------------------------	---------------------------------


Form Approved 03/05/19  
OMB No. 2040-0004

SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))	
Existing Environmental Permits	6.1 Existing Environmental Permits (check all that apply and print or type the corresponding permit number for each)
	<input checked="" type="checkbox"/> NPDES (discharges to surface water) AL0000868 <input type="checkbox"/> RCRA (hazardous wastes) <input type="checkbox"/> UIC (underground injection of fluids)
	<input checked="" type="checkbox"/> PSD (air emissions) 803-0009 001, X002, X003 X007-X015 <input type="checkbox"/> Nonattainment program (CAA) <input type="checkbox"/> NESHAPs (CAA)
	<input type="checkbox"/> Ocean dumping (MPRSA) <input type="checkbox"/> Dredge or fill (CWA Section 404) <input type="checkbox"/> Other (specify)
SECTION 7. MAP (40 CFR 122.21(f)(7))	
Map	7.1 Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> CAFO—Not Applicable (See requirements in Form 2B.)
SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))	
Nature of Business	8.1 Describe the nature of your business. Formaldehyde and Resin Manufacturing.
SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))	
Cooling Water Intake Structures	9.1 Does your facility use cooling water? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 10.1.
	9.2 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.) Public Water System
SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))	
Variance Requests	10.1 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.) <input type="checkbox"/> Fundamentally different factors (CWA Section 301(n)) <input type="checkbox"/> Water quality related effluent limitations (CWA Section 302(b)(2)) <input type="checkbox"/> Non-conventional pollutants (CWA Section 301(c) and (g)) <input type="checkbox"/> Thermal discharges (CWA Section 316(a)) <input checked="" type="checkbox"/> Not applicable

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**SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))**

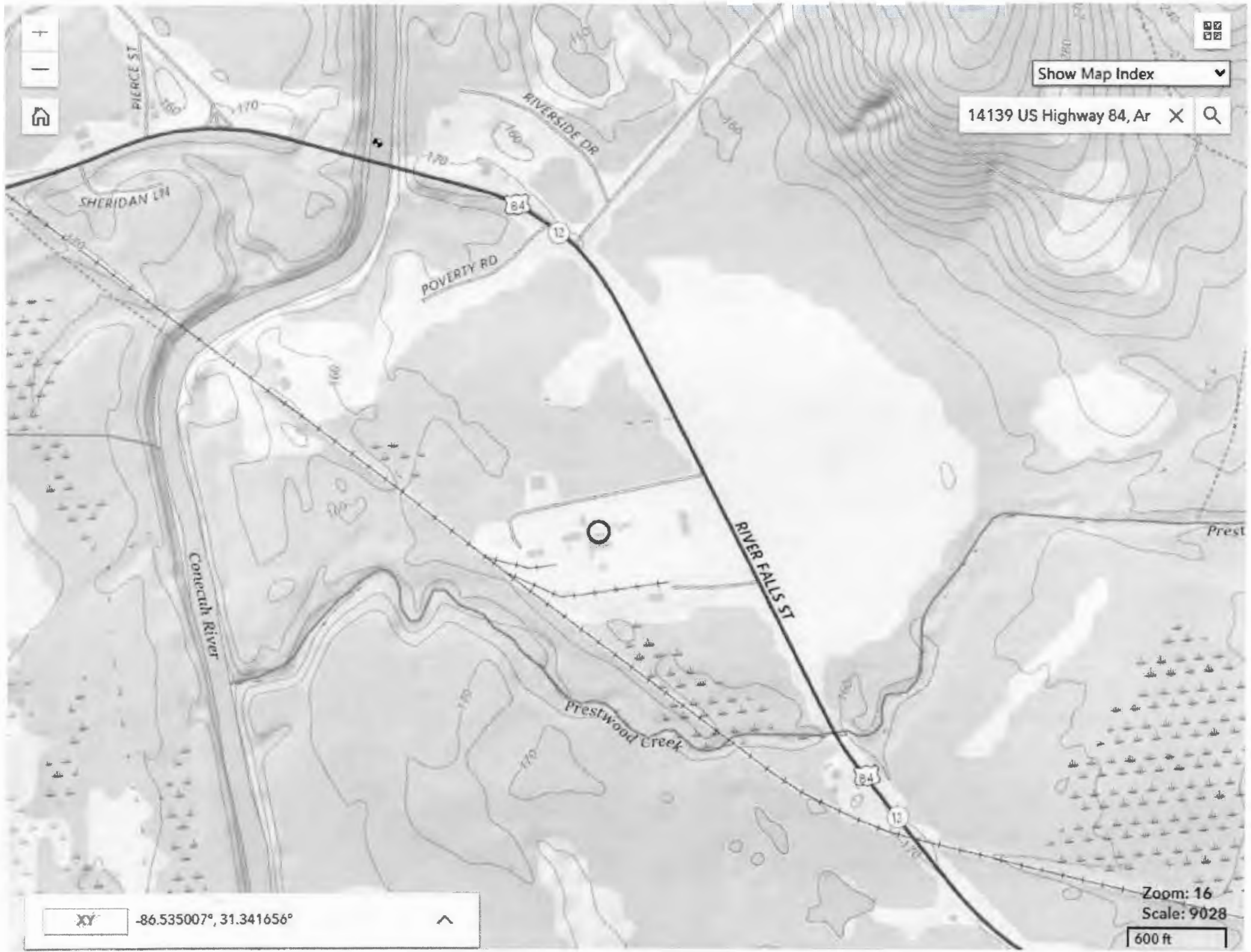
Checklist and Certification Statement	11.1	In Column 1 below, mark the sections of Form 1 that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.	
		<b>Column 1</b>	<b>Column 2</b>
	<input checked="" type="checkbox"/>	Section 1: Activities Requiring an NPDES Permit	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 2: Name, Mailing Address, and Location	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 3: SIC Codes	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 4: Operator Information	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 5: Indian Land	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 6: Existing Environmental Permits	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 7: Map	<input checked="" type="checkbox"/> w/ topographic map <input type="checkbox"/> w/ additional attachments
	<input checked="" type="checkbox"/>	Section 8: Nature of Business	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 9: Cooling Water Intake Structures	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 10: Variance Requests	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 11: Checklist and Certification Statement	<input type="checkbox"/> w/ attachments
11.2	<b>Certification Statement</b>		
	<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	
	<i>Daniel F. Cox</i>	<i>Plant Manager</i>	
	Signature	Date signed	
		<i>7/15/2023</i>	





Show Map Index

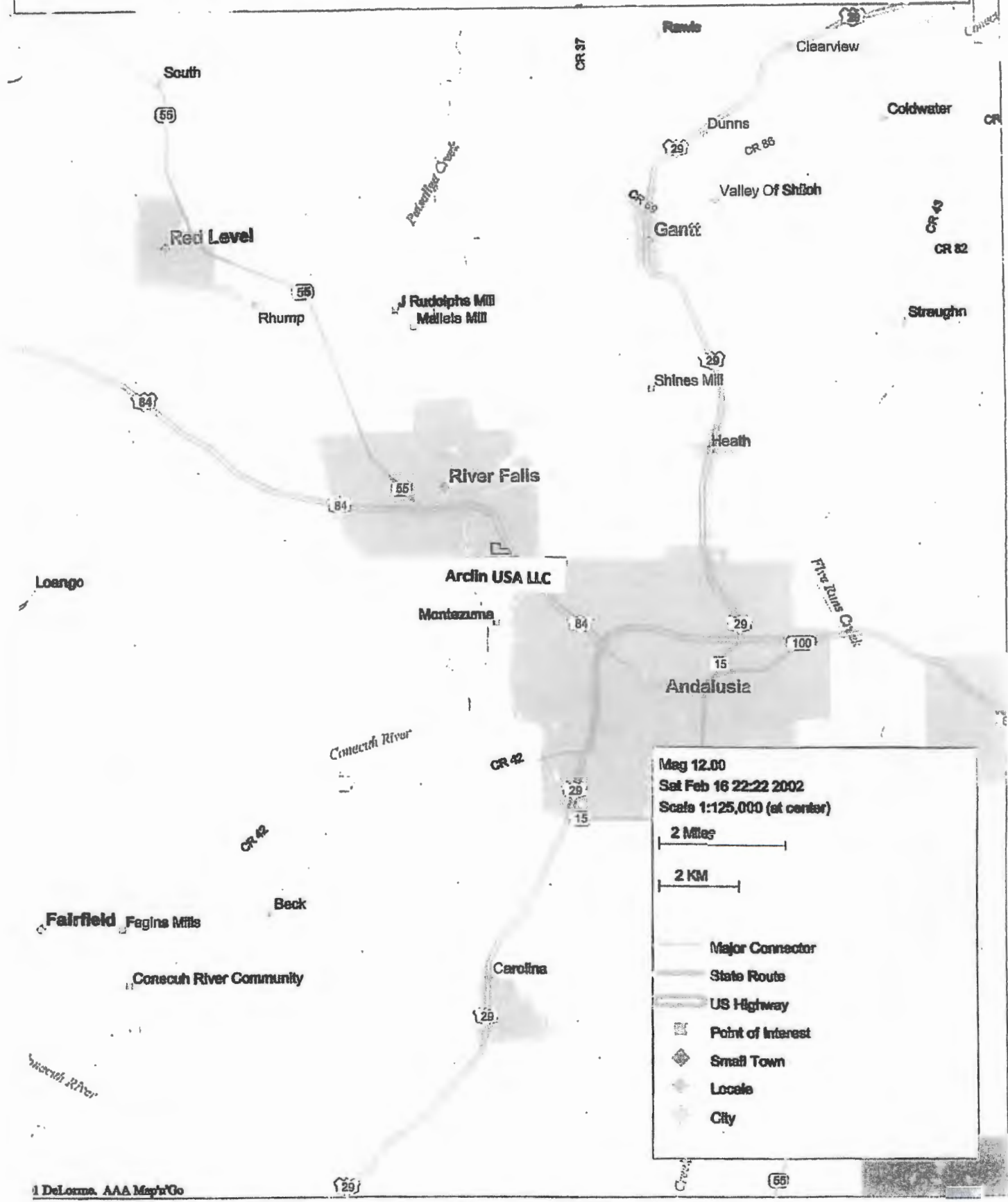
14139 US Highway 84, Ar



XY  -86.535007°, 31.341656°

Zoom: 16  
Scale: 9028  
600 ft

# Arclin USA Plant Location




Map 12.00  
 Sat Feb 16 22:22 2002  
 Scale 1:125,000 (at center)

2 Miles

2 KM

- Major Connector
- State Route
- US Highway
- Point of Interest
- ◆ Small Town
- ◆ Locale
- ◆ City

Form 2C NPDES		<b>U.S. Environmental Protection Agency</b> <b>Application for NPDES Permit to Discharge Wastewater</b> <b>EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS</b>
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**SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))**

<b>Outfall Location</b>	1.1	Provide information on each of the facility's outfalls in the table below.						
		<b>Outfall Number</b>	<b>Receiving Water Name</b>	<b>Latitude</b>			<b>Longitude</b>	
		001	Prestwood Creek to Conecu	31°	20'	30"	86°	31' 34"
		002	Prestwood Creek to Conecu	31°	20'	30"	86°	31' 34"
		004	Conecuh River	31°	20'	30"	86°	31' 34"

**SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))**

<b>Line Drawing</b>	2.1	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.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
---------------------	-----	---

**SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(g)(3))**

<b>Average Flows and Treatment</b>	3.1	For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.						
		<b>**Outfall Number** 001</b>						
		<b>Operations Contributing to Flow</b>						
		<b>Operation</b>						<b>Average Flow</b>
		Cooling Tower Blowdown - No flow >5 years for this outfall						mgd
		Boiler Blowdown						mgd
		Storm Water (potential contact)						mgd
		Safety Showers						mgd
		<b>Treatment Units</b>						
		<b>Description</b> (include size, flow rate through each treatment unit, retention time, etc.)	<b>Code from Table 2C-1</b>					<b>Final Disposal of Solid or Liquid Wastes Other Than by Discharge</b>
	No flow for this outfall - >5 years							

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Average Flows and Treatment Continued	3.1 cont.	<b>**Outfall Number** 002</b>		
	<b>Operations Contributing to Flow</b>			
	<b>Operation</b>		<b>Average Flow</b>	
	Once through cooling with option to 004		mgd	
	No flow for this outfall - >5 years		mgd	
			mgd	
			mgd	
	<b>Treatment Units</b>			
	<b>Description</b> (include size, flow rate through each treatment unit, retention time, etc.)		<b>Code from Table 2C-1</b>	<b>Final Disposal of Solid or Liquid Wastes Other Than by Discharge</b>
	No flow for this outfall - >5 years			
	<b>**Outfall Number** 004</b>			
	<b>Operations Contributing to Flow</b>			
	<b>Operation</b>		<b>Average Flow</b>	
Cooling Tower Blowdown - Flow is for all sources through OC		0.0140 mgd		
Boiler Blowdown		mgd		
Storm Water (potential contact)		mgd		
Safety Showers		mgd		
<b>Treatment Units</b>				
<b>Description</b> (include size, flow rate through each treatment unit, retention time, etc.)		<b>Code from Table 2C-1</b>	<b>Final Disposal of Solid or Liquid Wastes Other Than by Discharge</b>	
Effluent water will flow through steel holding tanks and pH a		1U , 4A		
System Users	3.2	Are you applying for an NPDES permit to operate a privately owned treatment works? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 4.		
	3.3	Have you attached a list that identifies each user of the treatment works? <input type="checkbox"/> Yes <input type="checkbox"/> No		

**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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 5.						
	4.2	Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.						
		<b>Outfall Number</b>	<b>Operation (list)</b>	<b>Frequency</b>		<b>Flow Rate</b>		<b>Duration</b>
				<b>Average Days/Week</b>	<b>Average Months/Year</b>	<b>Long-Term Average</b>	<b>Maximum Daily</b>	
		004	Water collected in tank	3 days/week	12 months/year	0.0140 mgd	0.1478 mgd	1 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 6.		
	5.2	Provide the following information on applicable ELGs.		
		<b>ELG Category</b>	<b>ELG Subcategory</b>	<b>Regulatory Citation</b>
		Organic Chemicals, Plastics, and S : Chemicals, Plastics, and Synthetic <i>12-11-23</i>	Thermosetting Resins Commodity Organic Chemicals <i>Ch...</i>	CFR 40 Part 414 subpart E CFR 40 Part 414 subpart F
Production-Based Limitations	5.3	Are any of the applicable ELGs expressed in terms of production (or other measure of operation)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 6.		
	5.4	Provide an actual measure of daily production expressed in terms and units of applicable ELGs.		
		<b>Outfall Number</b>	<b>Operation, Product, or Material</b>	<b>Quantity per Day</b>
		004	Formaldehyde Production 100%	140,000 lbs
	004	Urea Formaldehyde Resin	400,000 lbs	
	004	Phenol Formaldehyde Resin	190,000 lbs	

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**SECTION 6. IMPROVEMENTS (40 CFR 122.21(g)(6))**

Upgrades and Improvements	6.1	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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 6.3.			
	6.2	Briefly identify each applicable project in the table below.			
		<b>Brief Identification and Description of Project</b>	<b>Affected Outfalls (list outfall number)</b>	<b>Source(s) of Discharge</b>	<b>Final Compliance Dates</b>
					<b>Required</b> <b>Projected</b>
	6.3	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? (optional item) <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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.				
	<b>Table A. Conventional and Non-Conventional Pollutants</b>				
	7.1	Are you requesting a waiver from your NPDES permitting authority for one or more of the Table A pollutants for any of your outfalls? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.3.			
	7.2	If yes, indicate the applicable outfalls below. Attach waiver request and other required information to the application. Outfall Number _____ Outfall Number _____ Outfall Number _____			
	7.3	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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No; a waiver has been requested from my NPDES permitting authority for all pollutants at all outfalls.			
	<b>Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants</b>				
	7.4	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.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.8.			
	7.5	Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
	7.6	List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-3.			
		<b>Primary Industry Category</b>	<b>Required GC/MS Fraction(s)</b> (Check applicable boxes.)		
	Organic Chemical Manufacturing	<input checked="" type="checkbox"/> Volatile	<input checked="" type="checkbox"/> Acid	<input checked="" type="checkbox"/> Base/Neutral <input type="checkbox"/> Pesticide	
		<input type="checkbox"/> Volatile	<input type="checkbox"/> Acid	<input type="checkbox"/> Base/Neutral <input type="checkbox"/> Pesticide	
		<input type="checkbox"/> Volatile	<input type="checkbox"/> Acid	<input type="checkbox"/> Base/Neutral <input type="checkbox"/> Pesticide	

<b>Effluent and Intake Characteristics Continued</b>	7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? <input checked="" type="checkbox"/> Yes <span style="float: right;"><input type="checkbox"/> No</span>
	7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? <input checked="" type="checkbox"/> Yes <span style="float: right;"><input type="checkbox"/> No</span>
	7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? <input checked="" type="checkbox"/> Yes <span style="float: right;"><input type="checkbox"/> No</span>
	7.10	Does the applicant qualify for a small business exemption under the criteria specified in the instructions? <input type="checkbox"/> Yes → Note that you qualify at the top of Table B, then SKIP to Item 7.12. <span style="float: right;"><input checked="" type="checkbox"/> No</span>
	7.11	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? <input checked="" type="checkbox"/> Yes <span style="float: right;"><input type="checkbox"/> No</span>
	<b>Table C. Certain Conventional and Non-Conventional Pollutants</b>	
	7.12	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed on Table C for all outfalls? <input checked="" type="checkbox"/> Yes <span style="float: right;"><input type="checkbox"/> No</span>
	7.13	Have you completed Table C by providing (1) quantitative data for those pollutants that are limited either directly or indirectly in an ELG and/or (2) quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? <input checked="" type="checkbox"/> Yes <span style="float: right;"><input type="checkbox"/> No</span>
	<b>Table D. Certain Hazardous Substances and Asbestos</b>	
	7.14	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? <input checked="" type="checkbox"/> Yes <span style="float: right;"><input type="checkbox"/> No</span>
	7.15	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) by providing quantitative data, if available? <input type="checkbox"/> Yes <span style="float: right;"><input checked="" type="checkbox"/> No</span>
<b>Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)</b>		
7.16	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? <input type="checkbox"/> Yes → Complete Table E. <span style="float: right;"><input checked="" type="checkbox"/> No → SKIP to Section 8.</span>	
7.17	Have you completed Table E by reporting <i>qualitative</i> data for TCDD? <input type="checkbox"/> Yes <span style="float: right;"><input checked="" type="checkbox"/> No</span>	

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

<b>Used or Manufactured Toxics</b>	8.1	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? <input checked="" type="checkbox"/> Yes <span style="float: right;"><input type="checkbox"/> No → SKIP to Section 9.</span>
	8.2	List the pollutants below.
		1. Phenol <span style="margin-left: 200px;">4.</span> <span style="float: right;">7.</span>
		2. Total Phenols <span style="margin-left: 200px;">5.</span> <span style="float: right;">8.</span>
	3. <span style="margin-left: 200px;">6.</span> <span style="float: right;">9.</span>	

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

<b>Biological Toxicity Tests</b>	9.1	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) on a receiving water in relation to your discharge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 10.		
	9.2	Identify the tests and their purposes below.		
		<b>Test(s)</b>	<b>Purpose of Test(s)</b>	<b>Submitted to NPDES Permitting Authority?</b>
		Acute Toxicity	Permit Requirement	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	
			<input type="checkbox"/> Yes <input type="checkbox"/> No	

**SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(g)(12))**

<b>Contract Analyses</b>	10.1	Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 11.		
	10.2	Provide information for each contract laboratory or consulting firm below.		
			<b>Laboratory Number 1</b>	<b>Laboratory Number 2</b>
		<b>Name of laboratory/firm</b>	Environmental Resource Analysts	Pace Analytical
		<b>Laboratory address</b>	2975 Brown Court Auburn, AL, 36830	4320 Midmost Dr Mobile, AL, 36609
		<b>Phone number</b>	(334) 502-3444	251-344-9106
	<b>Pollutant(s) analyzed</b>	All pollutants tested for permit.	Formaldehyde	

**SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(g)(13))**

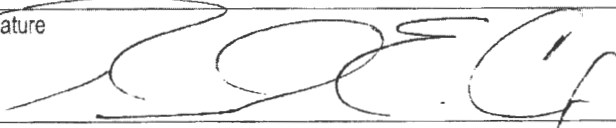
<b>Additional Information</b>	11.1	Has the NPDES permitting authority requested additional information? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 12.	
	11.2	List the information requested and attach it to this application.	
		1.	4.
		2.	5.
	3.	6.	



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

Checklist and Certification Statement	12.1	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.	
		<b>Column 1</b>	<b>Column 2</b>
	<input checked="" type="checkbox"/>	Section 1: Outfall Location	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 2: Line Drawing	<input checked="" type="checkbox"/> w/ line drawing <input type="checkbox"/> w/ additional attachments
	<input checked="" type="checkbox"/>	Section 3: Average Flows and Treatment	<input type="checkbox"/> w/ attachments <input type="checkbox"/> w/ list of each user of privately owned treatment works
	<input checked="" type="checkbox"/>	Section 4: Intermittent Flows	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 5: Production	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 6: Improvements	<input type="checkbox"/> w/ attachments <input type="checkbox"/> w/ optional additional sheets describing any additional pollution control plans
	<input checked="" type="checkbox"/>	Section 7: Effluent and Intake Characteristics	<input type="checkbox"/> w/ request for a waiver and supporting information <input type="checkbox"/> w/ explanation for identical outfalls <input type="checkbox"/> w/ small business exemption request <input type="checkbox"/> w/ other attachments <input checked="" type="checkbox"/> w/ Table A <input checked="" type="checkbox"/> w/ Table B <input checked="" type="checkbox"/> w/ Table C <input type="checkbox"/> w/ Table D <input type="checkbox"/> w/ Table E <input checked="" type="checkbox"/> w/ analytical results as an attachment
	<input checked="" type="checkbox"/>	Section 8: Used or Manufactured Toxics	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 9: Biological Toxicity Tests	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 10: Contract Analyses	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 11: Additional Information	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 12: Checklist and Certification Statement	<input type="checkbox"/> w/ attachments
12.2	<b>Certification Statement</b>		
	<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	
	Daniel Cox	Plant Manager	
	Signature	Date signed	
		7/5/2023	

EPA Identification Number 10000088255	NPDES Permit Number AL0000868	Facility Name Arclin USA LLC	Outfall Number
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**TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))<sup>1</sup>**

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
<input type="checkbox"/> 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 <sub>5</sub> )	<input type="checkbox"/>	Concentration	ppm	43	43	1.0	68	
		Mass						
2. Chemical oxygen demand (COD)	<input type="checkbox"/>	Concentration	ppm	33	33		1	
		Mass						
3. Total organic carbon (TOC)	<input type="checkbox"/>	Concentration	ppm	7.8			1	
		Mass						
4. Total suspended solids (TSS)	<input type="checkbox"/>	Concentration	ppm	13	13	1.3	68	
		Mass						
5. Ammonia (as N)	<input type="checkbox"/>	Concentration	ppm	0.6	0.6	0.02	68	
		Mass						
6. Flow	<input type="checkbox"/>	Rate	MGD	0.1478	0.1478	0.0140	365	
7. Temperature	<input type="checkbox"/>	winter	°C	°C	25 est			
		summer	°C	°C	38 est			
8. pH	<input type="checkbox"/>	minimum	Standard units	S.U.	7.85	7.85		52
		maximum	Standard units	S.U.	8.2	8.2	7.90	52

<sup>1</sup> 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))<sup>1</sup>**

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
<input type="checkbox"/> 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.										
<b>Section 1. Toxic Metals, Cyanide, and Total Phenols</b>										
1.1 Antimony, total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BMDL				1	
				Mass						
1.2 Arsenic, total (7440-38-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	41.2				1	
				Mass						
1.3 Beryllium, total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BDML				1	
				Mass						
1.4 Cadmium, total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BDML				1	
				Mass						
1.5 Chromium, total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	15.0				1	
				Mass						
1.6 Copper, total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	28.7				1	
				Mass						
1.7 Lead, total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BDML				1	
				Mass						
1.8 Mercury, total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BDML				1	
				Mass						
1.9 Nickel, total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BDML				1	
				Mass						
1.10 Selenium, total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BDML				1	
				Mass						
1.11 Silver, total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BDML				1	
				Mass						

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

	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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
1.13	Zinc, total (7440-66-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	24				1		
1.14	Cyanide, total (57-12-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppm Mass	BMDL				1		
1.15	Phenols, total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppm Mass	BMDL				1		
<b>Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)</b>												
2.1	Acrolein (107-02-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
2.2	Acrylonitrile (107-13-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
2.3	Benzene (71-43-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
2.4	Bromoform (75-25-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	17.6				1		
2.5	Carbon tetrachloride (56-23-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
2.6	Chlorobenzene (108-90-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
2.7	Chlorodibromomethane (124-48-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	1.1				1		
2.8	Chloroethane (75-00-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		

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	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)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
2.10	Chloroform (67-66-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.11	Dichlorobromomethane (75-27-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.12	1,1-dichloroethane (75-34-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.13	1,2-dichloroethane (107-06-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.14	1,1-dichloroethylene (75-35-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.15	1,2-dichloropropane (78-87-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.16	1,3-dichloropropylene (542-75-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.17	Ethylbenzene (100-41-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.18	Methyl bromide (74-83-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.19	Methyl chloride (74-87-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.20	Methylene chloride (75-09-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1
2.21	1,1,2,2-tetrachloroethane (79-34-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		1

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

	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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
2.23	Toluene (108-88-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
2.24	1,2-trans-dichloroethylene (156-60-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
2.25	1,1,1-trichloroethane (71-55-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
2.26	1,1,2-trichloroethane (79-00-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
2.27	Trichloroethylene (79-01-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
2.28	Vinyl chloride (75-01-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
<b>Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)</b>													
3.1	2-chlorophenol (95-57-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
3.2	2,4-dichlorophenol (120-83-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
3.3	2,4-dimethylphenol (105-67-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
3.4	4,6-dinitro-o-cresol (534-52-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								
3.5	2,4-dinitrophenol (51-28-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
					Mass								

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

	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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
3.7	4-nitrophenol (100-02-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
3.8	p-chloro-m-cresol (59-50-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
3.9	Pentachlorophenol (87-86-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
3.10	Phenol (108-95-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
3.11	2,4,6-trichlorophenol (88-05-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
<b>Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base/Neutral Compounds)</b>												
4.1	Acenaphthene (83-32-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
4.2	Acenaphthylene (208-96-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
4.3	Anthracene (120-12-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
4.4	Benzidine (92-87-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		
4.5	Benzo (a) anthracene (56-55-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass                ppb	BMDL				1		
4.6	Benzo (a) pyrene (50-32-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration    ppb Mass	BMDL				1		

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

	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)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.8	Benzo (ghi) perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.9	Benzo (k) fluoranthene (207-08-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		
4.10	Bis (2-chloroethoxy) methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.11	Bis (2-chloroethyl) ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		
4.14	4-bromophenyl phenyl ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.15	Butyl benzyl phthalate (85-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.16	2-chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.17	4-chlorophenyl phenyl ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
4.18	Chrysene (218-01-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	BMDL			1		
4.19	Dibenzo (a,h) anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							



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	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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BMDL				1	
4.21	1,3-dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
4.22	1,4-dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
4.23	3,3-dichlorobenzidine (91-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
4.24	Diethyl phthalate (84-66-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BMDL				1	
4.25	Dimethyl phthalate (131-11-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BMDL				1	
4.26	Di-n-butyl phthalate (84-74-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BMDL				1	
4.27	2,4-dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
4.28	2,6-dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
4.29	Di-n-octyl phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
4.31	Fluoranthene (206-44-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BMDL				1	
4.32	Fluorene (86-73-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration ppb	BMDL				1	

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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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
4.34 Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration								
4.35 Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration								
4.36 Hexachloroethane (67-72-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
4.37 Indeno (1,2,3-cd) pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration								
4.38 Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration								
4.39 Naphthalene (91-20-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
4.40 Nitrobenzene (98-95-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
4.41 N-nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration								
4.42 N-nitrosodi-n-propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration								
4.43 N-nitrosodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration								
4.44 Phenanthrene (85-01-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		
4.45 Pyrene (129-00-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration	ppb	BMDL				1		

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	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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm BMDL				1		1
<b>Section 5. Organic Toxic Pollutants (GC/MS Fraction--Pesticides)</b>												
5.1	Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.2	α-BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.3	β-BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.4	γ-BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.5	δ-BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.6	Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.7	4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.8	4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.9	4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.10	Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.11	α-endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							

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	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)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.13	Endosulfan sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.14	Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.15	Endrin aldehyde (7421-93-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.16	Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.17	Heptachlor epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.18	PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.19	PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.20	PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.21	PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.22	PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.23	PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							
5.24	PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v)) <sup>1</sup>										
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)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						

<sup>1</sup> 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))'**

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
<input type="checkbox"/> Check here if you believe all pollutants on Table C to be <b>present</b> in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for <i>each</i> pollutant.									
<input type="checkbox"/> Check here if you believe all pollutants on Table C to be <b>absent</b> in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for <i>each</i> pollutant.									
1. Bromide (24959-67-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	5.28			1	
2. Chlorine, total residual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	0.09			1	
3. Color	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
4. Fecal coliform	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
5. Fluoride (16984-48-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	1.5			1	
6. Nitrate-nitrite	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	0.38			1	
7. Nitrogen, total organic (as N)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	2.98			1	
8. Oil and grease	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	BMDL			1	
9. Phosphorus (as P), total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	0.66			1	
10. Sulfate (as SO <sub>4</sub> ) (14808-79-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	176			1	
11. Sulfide (as S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	0.10			1	

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**TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vii))<sup>1</sup>**

	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 <sub>3</sub> ) (14265-45-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	BMDL			1	
13.	Surfactants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppm	BMDL			1	
14.	Aluminum, total (7429-90-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	65.4			1	
15.	Barium, total (7440-39-3)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
16.	Boron, total (7440-42-8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
17.	Cobalt, total (7440-48-4)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
18.	Iron, total (7439-89-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	267			1	
19.	Magnesium, total (7439-95-4)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
20.	Molybdenum, total (7439-98-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Concentration Mass	ppb	25.7			1	
21.	Manganese, total (7439-96-5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
22.	Tin, total (7440-31-6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						
23.	Titanium, total (7440-32-6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration Mass						

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**TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))<sup>1</sup>**

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
<b>24. Radioactivity</b>									
Alpha, total	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration						
			Mass						
Beta, total	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration						
			Mass						
Radium, total	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration						
			Mass						
Radium 226, total	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Concentration						
			Mass						

<sup>1</sup> 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))**

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

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

	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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
21.	Diazinon	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
22.	Dicamba	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
23.	Dichlobenil	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
24.	Dichlone	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
25.	2,2-dichloropropionic acid	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
26.	Dichlorvos	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
27.	Diethyl amine	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
28.	Dimethyl amine	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
29.	Dinitrobenzene	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
30.	Diquat	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
31.	Disulfoton	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
32.	Diuron	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
33.	Epichlorohydrin	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
34.	Ethion	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
35.	Ethylene diamine	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
36.	Ethylene dibromide	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
37.	Formaldehyde	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Manufacture Formaldehyde Possible leaks	
38.	Furfural	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) <sup>1</sup>					
	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
40.	Isoprene	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
41.	Isopropanolamine	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
42.	Kelthane	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
43.	Kepone	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
44.	Malathion	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
45.	Mercaptodimethur	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
46.	Methoxychlor	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
47.	Methyl mercaptan	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
48.	Methyl methacrylate	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
49.	Methyl parathion	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
50.	Mevinphos	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
51.	Mexacarbate	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
52.	Monoethyl amine	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
53.	Monomethyl amine	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
54.	Naled	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
55.	Naphthenic acid	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
56.	Nitrotoluene	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
57.	Parathion	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

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**TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))<sup>1</sup>**

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

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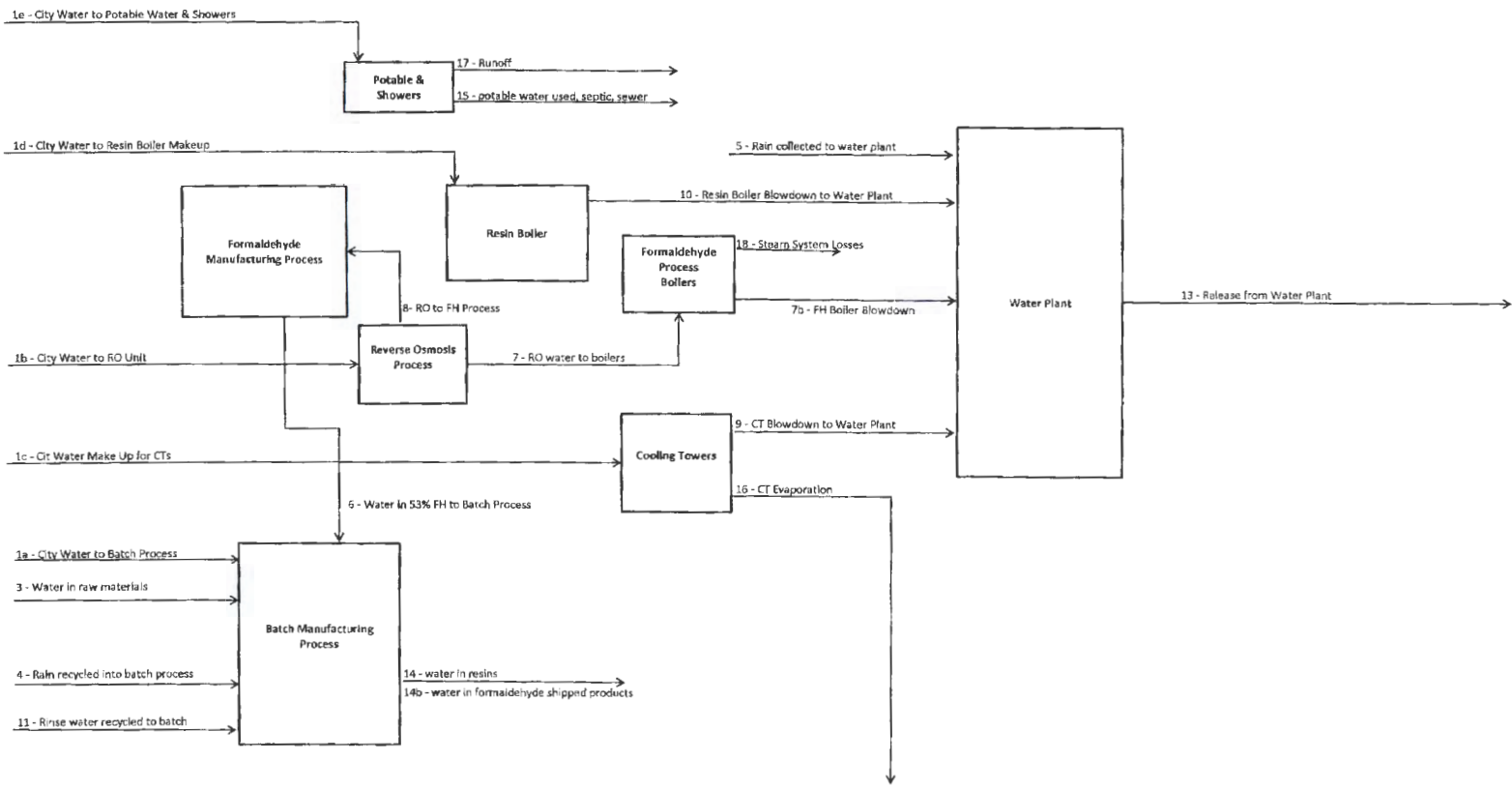
TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) <sup>1</sup>					
	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
78.	Xylene	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
79.	Xylenol	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
80.	Zirconium	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

<sup>1</sup> 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



## Stream Table


Input				Internal				Output			
Stream	Description	Yearly (Gal)	Daily (Gal)	Stream	Description	Yearly (Gal)	Daily (Gal)	Stream	Description	Yearly (Gal)	Daily (Gal)
1	Total City Water	26,776,386	73,360	6	Water in Formaldehyde to Batch Process	-	10,106	13	Release from Water Plant	4,118,747	11,284
1a	City water to batch process	4,234,805	11,602	7	Reverse Osmosis Water to Formaldehyde Boilers	4,197,271	11,499	14	Water in Resin Products	9,698,604	26,572
1b	City Water to Reverse Osmosis Unit	5,195,911	14,235	7b	Formaldehyde Boiler Blowdown to Water Plant	2,331,391	6,387	14b	Water in HCHO Products	316,090	866
1c	Cooling Tower Makeup	15,703,170	43,022	8	RO Absorber Water to Formaldehyde Production	946,080	2,736	15	Potable Water & Sewage	876,000	2,400
1d	Resin Boiler Makeup	730,000	2,000	9	Cooling Towers Blowdown to Water Plant	1,256,254	3,442	16	Cooling Tower Evaporation	14,446,916	39,581
1e	Potable Water & Sewage	912,500	2,500	10	Resin Boiler blowdown to Water Plant		90	17	Runoff (safety showers, freeze prot)	36,500	100
2	From Methanol and Air in Formaldehyde Process	3,006,296	8,236	11	Rinse water recycled into Batch Process	690,778	1,893	18	Steam system losses (condensate pi	1865880	5112
3	Water in raw materials	504,620	1,383								
4	Rain Water Recycled into Batch Process	579,255	1,587								
5	Rain Collection to Water Plant	498,225	1,365								
<b>TOTAL</b>			85,931					<b>TOTAL</b>			85,914



# Calculations Basis Table

Input			
Stream	Description	Basis of Calculation	Daily (Gal)
1	Total City Water	utility bill	73,360
1a	City water to batch process	batch formulations and numbers of respective batches produced of each formulation	11,602
1b	City Water to Reverse Osmosis Unit	Remainder of city water after other streams	14,235
1c	Cooling Tower Makeup	Gallon counters at makeup water input	43,022
1d	Resin Boiler Makeup	Estimated from past and current water balances	2,000
1e	Potable Water & Sewage	Estimated from past and current water balances	2,500
2	From Methanol and Air in Formaldehyde Process	chemical reaction balance from moles of formaldehyde produced	8,236
3	Water in raw materials	certificates of analysis and numbers of shipments of each respective raw material	1,383
4	Rain Water Recycled into Batch Process	Recycle Sump Area and average rainfall (12058 sq-ft, 60"/year), volumetric calculation	1,587
5	Rain Collection to Water Plant	Non-recycle Sump Area and average rainfall (13320 sq-ft, 60"/year), volumetric calculation	1,365
Internal			
Stream	Description	Basis of Calculation	Daily (Gal)
6	Water in Formaldehyde to Batch Process	formaldehyde production data (BUSYBOYS), 1.9gpm feed	10,106
7	Reverse Osmosis Water to Formaldehyde Boilers	rotameter/ mass balance on rotameter	11,499
7b	Formaldehyde Boiler Blowdown	material balance on Formaldehyde Boilers	6,387
8	Reverse Osmosis Water to Formaldehyde Process	rotameter/ mass balance on rotameter coupled with formaldehyde production data	2,736
9	Cooling Towers Blowdown	92/8 evap to blowdown ratio	3,442
10	Resin Boiler Blowdown to Water Plant	Collected in the sump and part of sump collection estimate, not pumped directly to WP	90
11	Utility/Rinse water recycled into batch	estimated from past and current water balances as well as production data	1,893
Output			
Stream	Description	Basis of Calculation	Daily (Gal)
13	Release from Water Plant	Flowmeters at Water Plant	11,284
14	Water in Products	Batch formulations and numbers of respective batches produced of each formulation	26,572
14b	Water in shipped Formaldehyde	JDE order history	866
15	Potable Water, Septic System, and Sewage	Estimated from past and current water balances	2,400
16	Cooling Tower Evaporation	92/8 evap to blowdown ratio	39,581
17	Runoff	Estimate from safety water testing (hydrants, showers), freeze protection	100
18	Steam System Losses	Condensate pot vents, steaming trucks, equipment, steam to DA (estimate)	5,112

\*\*\*2022 data used for calculations

Form 2F NPDES		<b>U.S Environmental Protection Agency</b> <b>Application for NPDES Permit to Discharge Wastewater</b> <b>STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY</b>
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**SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))**

<b>Outfall Location</b>	1.1	Provide information on each of the facility's outfalls in the table below							
		<b>Outfall Number</b>	<b>Receiving Water Name</b>	<b>Latitude</b>			<b>Longitude</b>		
		003	Tributary to Prestwood Creek to Conecuh River	31°	20'	30"	86°	31'	34"
				°	'	"	°	'	"
				°	'	"	°	'	"
				°	'	"	°	'	"
				°	'	"	°	'	"
				°	'	"	°	'	"

**SECTION 2. IMPROVEMENTS (40 CFR 122.21(g)(6))**

<b>Improvements</b>	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?				
		<input type="checkbox"/> Yes <span style="margin-left: 200px;"><input checked="" type="checkbox"/> No → SKIP to Section 3.</span>				
	2.2	Briefly identify each applicable project in the table below.				
		<b>Brief Identification and Description of Project</b>	<b>Affected Outfalls (list outfall numbers)</b>	<b>Source(s) of Discharge</b>	<b>Final Compliance Dates</b>	
					<b>Required</b>	<b>Projected</b>
	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? (Optional Item)				
		<input type="checkbox"/> Yes <span style="margin-left: 200px;"><input checked="" type="checkbox"/> No</span>				

**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.)
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

**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.																											
		<table border="1"> <thead> <tr> <th>Outfall Number</th> <th>Impervious Surface Area (within a mile radius of the facility)</th> <th>Total Surface Area Drained (within a mile radius of the facility)</th> </tr> </thead> <tbody> <tr> <td>003</td> <td>4 Acres</td> <td>25 Acres</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Outfall Number	Impervious Surface Area (within a mile radius of the facility)	Total Surface Area Drained (within a mile radius of the facility)	003	4 Acres	25 Acres																					
	Outfall Number	Impervious Surface Area (within a mile radius of the facility)	Total Surface Area Drained (within a mile radius of the facility)																										
	003	4 Acres	25 Acres																										
4.2	<p>Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.)</p> <p style="text-align: center;">See attached storm water BMP. Attachment B</p> <p style="text-align: center;">Roundup/Cornerstone Plus – Is used to spray around the plant to kills weeds.</p> <p style="text-align: center;">2,4-D – Herbicide used along the fence rows.</p> <p style="text-align: center;">Polaris AC Complete Herbicide – Sprayed in a parking area covered in rocks to control weeds. Class Act NG - Conditioning agent used with the Herbicides</p>																												
4.3	<p>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.)</p> <p style="text-align: center;"><b>Stormwater Treatment</b></p> <table border="1"> <thead> <tr> <th>Outfall Number</th> <th>Control Measures and Treatment</th> <th>Codes from Exhibit 2F-1 (list)</th> </tr> </thead> <tbody> <tr> <td>003</td> <td>Drainage from tank areas, internal buildings, chemical unloading areas, and product loading</td> <td>4-C</td> </tr> <tr> <td></td> <td>product loading areas is contained in cement lined sumps.</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F-1 (list)	003	Drainage from tank areas, internal buildings, chemical unloading areas, and product loading	4-C		product loading areas is contained in cement lined sumps.																				
Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F-1 (list)																											
003	Drainage from tank areas, internal buildings, chemical unloading areas, and product loading	4-C																											
	product loading areas is contained in cement lined sumps.																												

**SECTION 5. NON STORMWATER DISCHARGES (40 CFR 122.26(c)(1)(i)(C))**

Non-Stormwater Discharges	5.1	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.			
		Name (print or type first and last name)		Official title	
		Daniel Cox		Plant Manager	
		Signature		Date signed	
	5.2	Provide the testing information requested in the table below.			
		<b>Outfall Number</b>	<b>Description of Testing Method Used</b>	<b>Date(s) of Testing</b>	<b>Onsite Drainage Points Directly Observed During Test</b>
		003	Samples collected for this Permit renewal	03/12/2023	Yes

**SECTION 6. SIGNIFICANT LEAKS OR SPILLS (40 CFR 122.26(c)(1)(i)(D))**

Significant Leaks or Spills	6.1	Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years. 6/25/21 - 7,900 pounds of Formaldehyde was spilled into containment

**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.	
	7.1	Is this a new source or new discharge?
		<input type="checkbox"/> Yes → See instructions regarding submission of estimated data. <input checked="" type="checkbox"/> No → See instructions regarding submission of actual data.
	<b>Tables A, B, C, and D</b>	
7.2	Have you completed Table A for each outfall?	
	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

EPA Identification Number 100000088255	NPDES Permit Number AL0000868	Facility Name ArcIn USA LLC	Form Approved 03/05/19 OMB No. 2040-0004
<b>Discharge Information Continued</b>	7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	7.5	Do you know or have reason to believe any pollutants in Exhibit 2F-2 are present in the discharge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions? <input type="checkbox"/> Yes → SKIP to Item 7.18. <input checked="" type="checkbox"/> No	
	7.8	Do you know or have reason to believe any pollutants in Exhibit 2F-3 are present in the discharge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	7.10	Do you expect any of the pollutants in Exhibit 2F-3 to be discharged in concentrations of 10 ppb or greater? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	7.15	Do you know or have reason to believe any pollutants in Exhibit 2F-4 are present in the discharge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.17.	
	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? <input type="checkbox"/> Yes <input type="checkbox"/> No	
7.17	Have you provided information for the storm event(s) sampled in Table D? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

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<b>Discharge Information Continued</b>	<b>Used or Manufactured Toxics</b>		
	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?	
		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No → SKIP to Section 8.
	7.19	List the pollutants below, including TCDD if applicable.	
	1. Triethanolamine	4.	7.
	2. Phenol	5.	8.
	3. Total Phenols	6.	9.

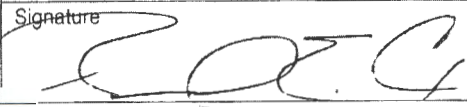
**SECTION 8. BIOLOGICAL TOXICITY TESTING DATA (40 CFR 122.21(g)(11))**

<b>Biological Toxicity Testing Data</b>	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?																			
		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No → SKIP to Section 9.																		
	8.2	Identify the tests and their purposes below.																			
		<table border="1"> <thead> <tr> <th>Test(s)</th> <th>Purpose of Test(s)</th> <th colspan="2">Submitted to NPDES Permitting Authority?</th> <th>Date Submitted</th> </tr> </thead> <tbody> <tr> <td>Acute on 004</td> <td>Permit requirement</td> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td>01/12/2023</td> </tr> <tr> <td></td> <td></td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td></td> <td></td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> </tbody> </table>	Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?		Date Submitted	Acute on 004	Permit requirement	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	01/12/2023			<input type="checkbox"/> Yes	<input type="checkbox"/> No				<input type="checkbox"/> Yes	<input type="checkbox"/> No
Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?		Date Submitted																	
Acute on 004	Permit requirement	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	01/12/2023																	
		<input type="checkbox"/> Yes	<input type="checkbox"/> No																		
		<input type="checkbox"/> Yes	<input type="checkbox"/> No																		

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

<b>Contract Analysis Information</b>	9.1	Were any of the analyses reported in Section 7 (on Tables A through C) performed by a contract laboratory or consulting firm?			
		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No → SKIP to Section 10.		
	9.2	Provide information for each contract laboratory or consulting firm below.			
			<b>Laboratory Number 1</b>	<b>Laboratory Number 2</b>	<b>Laboratory Number 3</b>
		Name of laboratory/firm	Environmental Resource Analysts	Pace Analytical	
		Laboratory address	2975 Brown Court Auburn, AL. 36830	4320 Midmost Dr Mobile, AL. 36609	
	Phone number	(334) 502-3444	- 251-344-9106 -		
	Pollutant(s) analyzed	All pollutants tested for permit.	Formaldehyde		

**SECTION 10. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))**

Checklist and Certification Statement	10.1	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.	
		<b>Column 1</b>	<b>Column 2</b>
		<input checked="" type="checkbox"/> Section 1	<input type="checkbox"/> w/ attachments (e.g., responses for additional outfalls)
		<input type="checkbox"/> Section 2	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 3	<input checked="" type="checkbox"/> w/ site drainage map
		<input checked="" type="checkbox"/> Section 4	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 5	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 6	<input type="checkbox"/> w/ attachments
		<input checked="" type="checkbox"/> Section 7	<input checked="" type="checkbox"/> Table A <input type="checkbox"/> w/ small business exemption request <input checked="" type="checkbox"/> Table B <input type="checkbox"/> w/ analytical results as an attachment <input checked="" type="checkbox"/> Table C <input type="checkbox"/> Table D
		<input checked="" type="checkbox"/> Section 8	<input type="checkbox"/> w/attachments
		<input checked="" type="checkbox"/> Section 9	<input type="checkbox"/> w/attachments (e.g., responses for additional contact laboratories or firms)
		<input checked="" type="checkbox"/> Section 10	<input type="checkbox"/>
	10.2	<b>Certification Statement</b> <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) Daniel Cox	Official title Plant Manager
		Signature 	Date signed 7/5/2023

EPA Identification Number 10000088255	NPDES Permit Number AL0000868	Facility Name Arclin USA LLC	Outfall Number DSN 003
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**TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))<sup>1</sup>**

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	BMDL				1	
2. Biochemical oxygen demand (BOD <sub>5</sub> )	13.5 ppm	9.7 ppm			1	
3. Chemical oxygen demand (COD)	152 ppm	67.2 ppm			1	
4. Total suspended solids (TSS)	109 ppm	125 ppm			1	
5. Total phosphorus	0.27 ppm	0.30 ppm			1	
6. Total Kjeldahl nitrogen (TKN)	2.85 ppm	2.81 ppm			1	
7. Total nitrogen (as N)	2.58 ppm	2.36 ppm			1	
8. pH (minimum)	8.60				1	
pH (maximum)	8.65				1	

<sup>1</sup> 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 100000088255	NPDES Permit Number AL0000868	Facility Name Arclin USA LLC	Outfall Number DSN 003
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**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))<sup>1</sup>**

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.

Pollutant and CAS Number (if available)	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		
Bromide	BMDL	BMDL			1	
Chlorine Total	BMDL	----			1	
Nitrite/Nitrate	1.14 ppm	0.98 ppm			1	
TKN	2.85 ppm	2.81 ppm			1	
Sulfate	14.8 ppm	6.7 ppm			1	
Sulfite	BMDL	BMDL			1	
Surfactants	BMDL	0.19 ppm			1	
Aluminum	2.69 PPM	2.73 ppm			1	
Iron	3.07 PPM	3.24 ppm			1	
Total Phenols	BMDL	BMDL			1	
Formaldehyde	0.05 ppm	0.1 ppm			1	
Molybdenum	BMDL	0.01 ppm			1	

<sup>1</sup> 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 10000088255	NPDES Permit Number AL0000868	Facility name Arclin USA LLC	Outfall Number DSN 003
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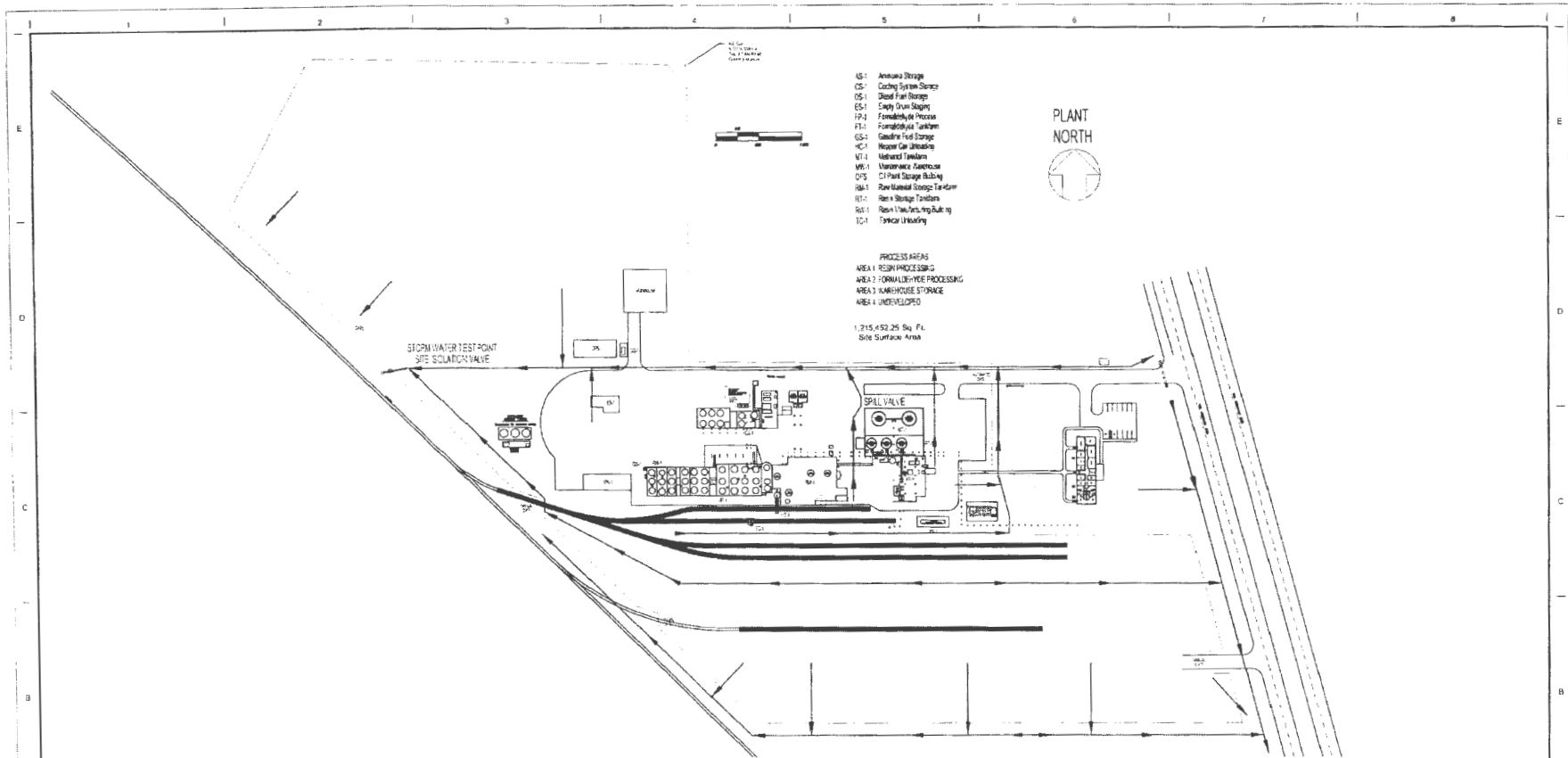
Form Approved 03/05/19  
OMB No. 2040-0004

**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)
03/12/2023	1.3	0.30	>72 hours	76 gpm	2,000

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



- AS-1 Aerosol Storage
- CS-1 Coating System Storage
- DS-1 Diesel Fuel Storage
- ES-1 Empty Drum Storage
- FP-1 Formulation Process
- FL-1 Formulation Tank
- GS-1 Gasoline Fuel Storage
- HC-1 Heavy Car Unloading
- MT-1 Material Tank
- WH-1 Warehouse Function
- DS-1 C1 Part Storage Building
- RS-1 Raw Material Storage Tank
- RT-1 Raw Material Tank
- RS-1 Raw Material Building
- TC-1 Typical Building

PROCESS AREAS  
 AREA 1 FORM PROCESSING  
 AREA 2 FORMULATING PROCESSING  
 AREA 3 WAREHOUSE STORAGE  
 AREA 4 UNDEVELOPED

1,315,492.25 Sq. Ft.  
 Site Surface Area

**Arclin™**  
 Performance Applied

ANDALUSIA      ALABAMA      PLANT 11

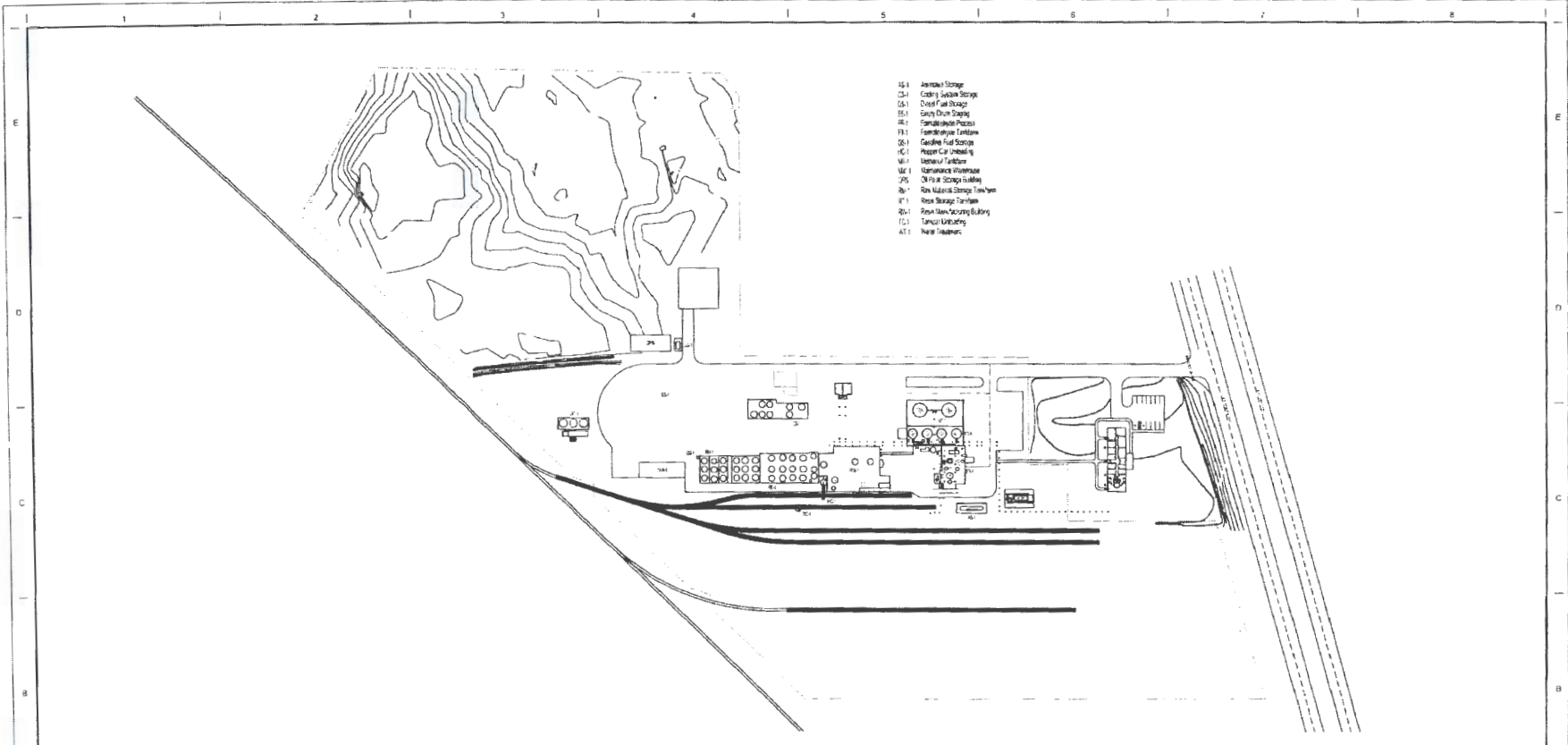
**ANDALUSIA PLANT  
 SITE PLAN  
 STORM WATER DRAINAGE**

DRAWING NO.      REVISION

**DRAINAGE SITE MAP**

REFERENCE DRAWINGS		REVISION HISTORY			REVISION HISTORY			REVISION HISTORY			REVISION HISTORY			REVISION HISTORY							
NO.	REV.	PROJ. NO.	STATUS	BY	CHK. APP.	DESCRIPTION	REV.	NO.	PROJ. NO.	STATUS	BY	CHK. APP.	DESCRIPTION	REV.	NO.	PROJ. NO.	STATUS	BY	CHK. APP.	DESCRIPTION	

SHEET SIZE		DRAWING TITLE	
		ANDALUSIA PLANT SITE PLAN STORM WATER DRAINAGE	
SCALE	DATE	DRAWING NO.	REVISION
CHECKED			
DESIGNED			
APPROVED			



- 14-4 Jet Fuel Storage
- 15-4 Crude Fuel Storage
- 15-1 Diesel Fuel Storage
- 15-3 Safety Drum Storage
- 16-4 Stormwater Storage
- 17-1 Stormwater Treatment
- 18-1 Gasoline Fuel Storage
- 18-2 Heavy Fuel Storage
- 18-3 Stormwater Treatment
- 18-4 Stormwater Treatment
- 18-5 Stormwater Treatment
- 18-6 Stormwater Treatment
- 18-7 Stormwater Treatment
- 18-8 Stormwater Treatment
- 18-9 Stormwater Treatment
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- 18-99 Stormwater Treatment
- 18-100 Stormwater Treatment

**Arclin™**  
Performance Applied

ANDALUSIA ALABAMA PLANT 12

**ANDALUSIA PLANT  
SITE PLAN  
STORM WATER DRAINAGE**

DRAWING NO. REVISION

**DRAINAGE SITE MAP, SHT. 2 OF 2**

NO.	REV.	DATE	BY	CHK.	APP.	DESCRIPTION
REFERENCE DRAWINGS						
REVISION HISTORY						
REVISION HISTORY						
REVISION HISTORY						
REVISION HISTORY						
REVISION HISTORY						

SHEET SIZE	
SCALE	DATE
DRAWN	
CHECKED	
DESIGNED	
APPROVED	

## EPA Form 2F Attachment C

Storm Water Discharge 003

2023

**Part B.**

Note: No average values are available.

Pollutant	CAS No.	Maximum Values		No. of	Pollutant Source
		Grab Sample	Composite Sample	Events Sampled	
Acenaphthene, µg/l	83-32-9	BMDL	BMDL	1	NA
Acrylonitrile, µg/l	107-13-1	BMDL	BMDL	1	NA
Benzene, µg/l	71-43-2	BMDL	BMDL	1	NA
3,4 Benzofluoranthene, µg/l	205-99-2	BMDL	BMDL	1	NA
Carbon Tetrachloride, µg/l	56-23-5	BMDL	BMDL	1	NA
Chlorobenzene, µg/l	108-90-7	BMDL	BMDL	1	NA
1,2,4 Trichlorobenzene, µg/l	120-82-1	BMDL	BMDL	1	NA
Hexachlorobenzene, µg/l	118-74-1	BMDL	BMDL	1	NA
1,2 Dichloroethane, µg/l	107-06-2	BMDL	BMDL	1	NA
1,1,1 Trichloroethane, µg/l	71-55-6	BMDL	BMDL	1	NA
Hexachloroethane, µg/l	67-72-1	BMDL	BMDL	1	NA
1,1 Dichloroethane, µg/l	75-34-3	BMDL	BMDL	1	NA
1,1,2 Trichloroethane, µg/l	79-00-5	BMDL	BMDL	1	NA
Chloroethane, µg/l	75-00-3	BMDL	BMDL	1	NA
Chloroform, µg/l	67-66-3	BMDL	BMDL	1	NA
2 Chlorophenol, µg/l	95-57-8	BMDL	BMDL	1	NA
1,2 Dichlorobenzene, µg/l	95-50-1	BMDL	BMDL	1	NA
1,3 Dichlorobenzene, µg/l	541-73-1	BMDL	BMDL	1	NA
1,4 Dichlorobenzene, µg/l	106-46-7	BMDL	BMDL	1	NA
1,1 Dichloroethylene, µg/l	75-35-4	BMDL	BMDL	1	NA
1,2 Trans Dichloroethylene, µg/l	156-60-5	BMDL	BMDL	1	NA
2,4 Dichlorophenol, µg/l	120-83-2	BMDL	BMDL	1	NA
1,2 Dichloropropane, µg/l	78-87-5	BMDL	BMDL	1	NA
1,3 Dichloropropylene, µg/l	542-75-6	BMDL	BMDL	1	NA
2,4 Dimethylphenol, µg/l	105-67-9	BMDL	BMDL	1	NA
2,4 Dinitrotoluene, µg/l	121-14-2	BMDL	BMDL	1	NA
2,6 Dinitrotoluene, µg/l	606-20-2	BMDL	BMDL	1	NA
Ethylbenzene, µg/l	100-14-4	BMDL	BMDL	1	NA
Fluoranthene, µg/l	206-44-0	BMDL	BMDL	1	NA

Methylene Chloride, µg/l	75-09-2	BMDL	BMDL	1	NA
Methyl Chloride, µg/l	74-87-3	BMDL	BMDL	1	NA
Hexachlorobutadiene, µg/l	87-68-3	BMDL	BMDL	1	NA
Naphthalene, µg/l	91-20-3	BMDL	BMDL	1	NA
Nitrobenzene, µg/l	98-95-3	BMDL	BMDL	1	NA
2 Nitrophenol, µg/l	88-75-5	BMDL	BMDL	1	NA
4 Nitrophenol, µg/l	100-02-7	BMDL	BMDL	1	NA
2,4 Dinitrophenol, µg/l	51-28-5	BMDL	BMDL	1	NA
4,6 Dinitro-O-Cresol, µg/l	534-52-1	BMDL	BMDL	1	NA
Phenols, Total ppm	108-95-2	BMDL	BMDL	1	NA
Phenol, µg/l	108-95-2	BMDL	BMDL	1	NA
Bis (2-Ethylhexyl) phthalate, µg/l	117-81-7	BMDL	BMDL	1	NA
Di-N-Butyl Phthalate, µg/l	84-74-2	BMDL	BMDL	1	NA
Diethyl Phthalate, µg/l	84-66-2	BMDL	BMDL	1	NA
Dimethyl Phthalate, µg/l	131-11-3	BMDL	BMDL	1	NA
Benzo (A) Anthracene, µg/l	56-55-3	BMDL	BMDL	1	NA
Benzo (A) Pyrene, µg/l	50-32-8	BMDL	BMDL	1	NA
Benzo (K) Fluoranthene, µg/l	207-08-9	BMDL	BMDL	1	NA
Chrysene, µg/l	218-01-9	BMDL	BMDL	1	NA
Acenaphthylene, µg/l	208-96-8	BMDL	BMDL	1	NA
Anthracene, µg/l	120-12-7	BMDL	BMDL	1	NA
Fluorene, µg/l	86-73-7	BMDL	BMDL	1	NA
Phenanthrene, µg/l	85-01-8	BMDL	BMDL	1	NA
Pyrene, µg/l	129-00-0	BMDL	BMDL	1	NA
Tetrachloroethylene, µg/l	127-18-4	BMDL	BMDL	1	NA
Toluene, µg/l	108-88-3	BMDL	BMDL	1	NA
Trichloroethylene, µg/l	79-01-6	BMDL	BMDL	1	NA
Vinyl Chloride, µg/l	75-01-4	BMDL	BMDL	1	NA
Chromium, mg/l	7440-47-3	BMDL	BMDL	1	Background
Copper, mg/l	7440-50-8	0.014	0.012	1	Background
Cyanide, mg/l	57-12-5	BMDL	BMDL	1	NA
Lead, mg/l	7439-92-1	BMDL	BMDL	1	Background
Nickel, mg/l	7440-02-0	BMDL	BMDL	1	Background
Zinc, mg/l	7440-66-6	0.14	0.19	1	Background

**Title: EPA Form 2C Attachment A**

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**ATTACHMENT A (004 Discharge)**

The following is a list of substances listed in Table 2C-3 and included in section V D of the form.

1. Formaldehyde is shipped into the site and manufactured on site. This substance may come from the formaldehyde manufacturing process or the resin manufacturing process. Methods of treatment include confinement and recycle. Formaldehyde is tested on the Effluent Tanks before discharge.
2. Triethanolamine is used as a raw material in the resin manufacturing process. Methods of treatment include confinement and recycle. No analysis is available.

**(002 Discharge) Emergency Cooling**

No pollutants expected – Once through non-contact cooling only.



**Title: EPA Form 2C Attachment B**

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**ATTACHMENT B (004 Discharge)**

The following is an explanation of why the substances marked believed present in EPA Form 2C V Part B were so marked.

1. Bromide may be present in our effluent because it is used as a biocide in our cooling towers.
2. Chlorine, total residual may be present in our effluent because it is added to the city water being supplied our plant.
3. Fluoride may be present in our effluent because is added to the city water being supplied our plant.
4. Nitrate, nitrite and total organic nitrogen may be present in our effluent because urea and several lessor nitrogen containing substances are used as raw materials in the resin manufacturing process.
5. Oil and grease may be present in our effluent because they are used in maintenance at the plant.
6. Phosphorus may be present in our effluent because it is an addition in our boiler treatment chemicals.
7. Sulfate may be present in our effluent because sulfuric acid is an additive for pH control in the Effluent System.
8. Sulfite may be present in our effluent because it is used as an oxygen scavenger in our boiler water treatment.
9. Surfactants may be present in our effluent because they are used to control foaming in our formaldehyde and resin manufacturing processes.
10. Iron may be present in our effluent because of the corrosion of steel and iron piping in the plant.

**Water Treatment**

			Lbs/Year			
ChemTreat	Function	Chemical Compounds	Qty Used	Frequency of use	Concentration	
<b>Cooling Tower</b>	CL-5685	Scale and corrosion inhibitor	5764	daily, based on blow down	75ppm	
	C2189T	Microbiological control	Bromine/Chlorine	300	daily, based on micro-bio counts	1ppm
<b>Resin Boiler</b>	BL2802	Internal boiler treatment	sodium hydroxide, synthetic organic polymers, cyclohexylamine, morpholine, 2-diethylaminoethanol	1103.64	daily, based on blow down	2500ppb
	BL1285	oxygen scavenger	DEHA	194	daily, based on blow down	500ppb
<b>Boiler Feed H2O</b>	BL2802	Internal boiler treatment	sodium hydroxide, synthetic organic polymers, cyclohexylamine, morpholine, 2-diethylaminoethanol	4414.55	daily, based on blow down	2500ppb
	BL1285	oxygen scavenger	DEHA	194	daily, based on blow down	500ppb

**List**

C2189T	Microbiological control	Bromine/Chlorine
CL-5685	Scale and corrosion inhibitor	sodium hydroxide, chlorotolytriazole salt, polymers
BL2802	Internal boiler treatment	sodium hydroxide, synthetic organic polymers, cyclohexylamine, morpholine, 2-diethylaminoethanol
BL1285	oxygen scavenger	DEHA